

MARVELL TECHNOLOGY GROUP LTD  
Form 10-K  
March 28, 2011  
[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 29, 2011

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 0-30877

**Marvell Technology Group Ltd.**

*(Exact name of registrant as specified in its charter)*

**Bermuda**  
*(State or other jurisdiction of  
incorporation or organization)*

**77-0481679**  
*(I.R.S. Employer  
Identification No.)*

**Canon's Court, 22 Victoria Street, Hamilton HM 12, Bermuda**

*(Address of principal executive offices)*

**(441) 296-6395**

*(Registrant's telephone number, including area code)*

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

# Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Title of Each Class	Name of each exchange on which registered
Common shares, \$0.002 par value per share	The NASDAQ Stock Market LLC

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 (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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. (Check one):

Large accelerated filer <input checked="" type="checkbox"/>	Accelerated filer <input type="checkbox"/>	Non-accelerated filer <input type="checkbox"/>	Smaller reporting company <input type="checkbox"/>
		(Do not check if a smaller reporting company)	

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

The aggregate market value of the registrant's common shares held by non-affiliates of the registrant was approximately \$6,312 million based upon the closing price of \$14.92 per share on the NASDAQ Global Select Market on July 30, 2010 (the last business day of the registrant's most recently completed second quarter). Common shares held by each director and executive officer of the registrant, as well as shares held by each holder of more than 5% of the common shares known to the registrant (based on Schedule 13G filings), have been excluded for purposes of the foregoing calculation.

As of March 18, 2011 there were 633.4 million shares of the registrant outstanding.

## DOCUMENTS INCORPORATED BY REFERENCE

Portions of Part III of this Form 10-K are incorporated by reference from the registrant's definitive proxy statement for its 2011 annual general meeting of shareholders, which proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year covered by this Form 10-K.

## TRADEMARKS

Marvell®, Prestera®, LinkStreet®, Virtual Cable Tester®, Alaska®, QDEO®, Yukon®, ARMADA® and DSP Switcher® are registered trademarks of Marvell International Ltd. and/or its affiliates. Discovery, Kirkwood, Avanta and Avastar are trademarks of Marvell International Ltd. and/or

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

its affiliates. MIPS® is a registered trademark of MIPS Technologies, Inc. PowerPC is a trademark of International Business Machines Corporation. Any other trademarks or trade names mentioned are the property of their respective owners.

**Table of Contents**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>PART I</b>	
Item 1. <u>Business</u>	4
Item 1A. <u>Risk Factors</u>	19
Item 1B. <u>Unresolved Staff Comments</u>	35
Item 2. <u>Properties</u>	35
Item 3. <u>Legal Proceedings</u>	36
Item 4. <u>(Removed and Reserved)</u>	36
<b>PART II</b>	
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	37
Item 6. <u>Selected Financial Data</u>	40
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	41
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	56
Item 8. <u>Financial Statements and Supplementary Data</u>	58
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	99
Item 9A. <u>Controls and Procedures</u>	99
Item 9B. <u>Other Information</u>	99
<b>PART III</b>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	100
Item 11. <u>Executive Compensation</u>	100
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	100
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	101
Item 14. <u>Principal Accounting Fees and Services</u>	102
<b>PART IV</b>	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	103
<u>Signatures</u>	107

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**Forward-Looking Statements**

*The statements contained in this Annual Report on Form 10-K that are not purely historical are forward-looking statements and include statements regarding our expectations, beliefs, intentions or strategies regarding the future. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, can, and similar expressions identify such forward-looking statements. These are statements that relate to future periods and include, without limitation, statements relating to such matters as: our anticipation that the rate of new orders and shipments will vary significantly from quarter to quarter; our expectation regarding industry trends, including statements regarding seasonal trends in the gaming industry; our expectation that a significant percentage of our sales will continue to come from direct sales to key customers; our expectations that quarterly operating results will fluctuate from quarter to quarter; our expectation regarding the current economic environment; our expectations regarding future growth based on market acceptance of our products, costs of securing access to adequate manufacturing capacity, the timing and extent of research and development projects, costs of making improvements to facilities, operating expenses and shipments of certain products; the potential opportunities for a new generation of integrated circuit solutions in response to growing demand for products in the semiconductor industry; our expectations regarding our facilities and the sufficiency of our facilities; the anticipated features and benefits of our technology solutions; our ability to execute our strategy and components of our strategy; our plan to strengthen and expand our relationship with customers using a variety of processes; our ability to anticipate the needs of our customers; our expectations that average selling prices of our products will continue to be subject to significant pricing pressures; our ability to transition our semiconductor products to increasingly smaller line width geometries; our expectations regarding competition and our ability to compete successfully in the markets for our products; our ability to reduce our customers' overall system costs; our plan to attract new customers and retain existing customers by the introduction of new products; our continued efforts relating to the protection of our intellectual property, including claims of patent infringement; our expectations regarding the amount of customer concentration in the future; our expectations regarding the portion of our operations and sales outside of the United States, including the amount of our future sales in Asia; our estimations regarding stock-based compensation; our expectations regarding our investment in research and development; our expected results, cash flows and expenses, including those related to sales and marketing, research and development and general and administrative; our expectations regarding acquisitions and investments; our expectations regarding revenue, sources of revenue and make-up of revenue; our expectation regarding gross margin and events that may cause gross margin to fluctuate; our expectations regarding litigation and the impact of legal proceedings and claims; our expectations regarding the adequacy of our capital resources to meet our capital needs; our expectations regarding the growth in business and operations; our expectations regarding future impairment review of our goodwill and intangible assets; our ability to attract and retain highly skilled employees; our expectations regarding the effectiveness of our internal control over financial reporting; our plans regarding dividends; our plans regarding forward exchange contracts and the effect of foreign exchange rates; our expectations regarding litigation; our expectations regarding arrangements with suppliers; our expectations regarding the demand for our products; our expectations regarding the implementation and improvement of operational and financial systems, as well as the implementation of additional procedures and other internal management systems; our expectations regarding the effect of recent accounting pronouncements and changes in taxation rules; our expectations regarding alternative information storage technologies; our expectations regarding defects in our products; and our expectations regarding our share repurchase program. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those indicated in the forward-looking statements. Factors that could cause actual results to differ materially from those predicted, include but are not limited to: the impact of international conflict and continued economic volatility in either domestic or foreign markets; our dependence upon the hard disk drive industry which is highly cyclical; the impact of significant competition in the mobile and wireless communications markets; our dependence on a smaller number of customers; our ability to scale our operations in response to changes in demand for existing or new products and services; our maintenance of an effective system of internal control over financial reporting; our ability to*

**Table of Contents**

*develop new and enhanced products; the impact of our complex products on market acceptance of our new products; our reputation with current or prospective customers; defects in our products; our success in integrating businesses we acquire and the impact such acquisitions may have on our operating results; our ability to estimate customer demand accurately; the success of our strategic relationships with customers; our reliance on independent foundries and subcontractors for the manufacture, assembly and testing of our products; our ability to manage future growth; the development and evolution of markets for our integrated circuits; our ability to protect our intellectual property; the impact of any change in our application of the U.S. federal income tax laws and/or foreign tax laws and the loss of any beneficial tax treatment that we currently enjoy; the impact of changes in international financial and regulatory conditions; the impact of changes in management; the impact of natural disasters on our business; our ability to obtain and renew licenses from third parties; the impact of the crisis in the global financial markets; our ability to raise funds; our plans to implement and improve operational, financial and management systems; the impact of environmental regulations; and the outcome of pending or future litigation and legal proceedings. Additional factors that could cause actual results to differ materially include the risks discussed in Part I, Item 1A, Risk Factors and Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations. These forward-looking statements speak only as of the date hereof. Unless required by law, we undertake no obligation to update publicly any forward-looking statements.*

---

## **Table of Contents**

In this Annual Report on Form 10-K, references to Marvell, we, us, our or the Company mean Marvell Technology Group Ltd. and its subsidiaries, except where it is made clear that the term means only the parent company.

### **PART I**

#### **Item 1. *Business* Overview**

We are one of the world's largest fabless semiconductor providers 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 ARM-based microprocessor integrated circuits. We also develop platforms that we define as integrated hardware and software that incorporate digital computing technologies, designed and configured to provide an optimized computing solution compared to individual components. Our broad product portfolio includes devices for data storage, enterprise-class Ethernet data switching, Ethernet physical-layer transceivers ( PHY ), handheld cellular, Ethernet-based wireless networking, personal area networking, Ethernet-based PC connectivity, control plane communications controllers, video-image processing and power management solutions. Our products serve diverse applications used in carrier, metropolitan, enterprise and PC-client data communications and storage systems. Additionally, we serve the consumer electronics market for the convergence of voice, video and data applications.

Our core technologies were initially focused on the storage market, where we provide high-performance products to storage companies, such as Hitachi Ltd., Samsung Semiconductor, Seagate Technology, Toshiba Corporation and Western Digital Corporation. We subsequently applied our technology to the networking market, where we provide industry-leading PHY wired and wireless Ethernet-switching solutions that enable the data transmission between communications systems to manufacturers of high-speed networking and wireless equipment, including Brocade Communication Systems, Inc., Cisco Systems, Inc., Dell Inc., Hewlett Packard Company, Huawei Technologies Co., Ltd., Intel Corporation, and Juniper Networks, Inc. Our wireless technology has a variety of uses in emerging consumer electronic devices, including enabling applications such as wireless connectivity, gaming devices, streaming audio, video, Voice over Internet Protocol ( VoIP ) and wireless printing, for products offered by companies such as Cisco Systems, Hewlett Packard, Microsoft Corporation and Sony Corporation. We also provide communications and applications processor products for cellular and handheld solutions with customers such as Research in Motion Limited, Microsoft and Motorola. Lastly, we provide printer SoC and system level solutions for both inkjet and laser jet printer systems for companies such as Hewlett Packard. We also have applied our technology by introducing integrated circuits and modules that provide power management broadly to electronic devices.

We were incorporated in Bermuda in January 1995. Our registered address is Canon's Court, 22 Victoria Street, Hamilton HM 12, Bermuda, and our telephone number there is (441) 296-6395. The mailing address of our business offices in Bermuda is Argyle House, 41A Cedar Avenue, Hamilton, HM 12, Bermuda. The address of our United States 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, Germany, Hong Kong, India, Israel, Italy, Japan, Korea, Malaysia, Netherlands, Singapore, Spain, Sweden, Switzerland, Taiwan and the United Kingdom. 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 31, 2009 as fiscal 2009, the fiscal year ended January 30, 2010 as fiscal 2010, the fiscal year ended January 29, 2011 as fiscal 2011 and the fiscal year ending January 28, 2012 as fiscal 2012.

## **Table of Contents**

### **Available Information**

Our website address is located at [www.marvell.com](http://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 United States 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 greater features and functions in ever smaller chip sizes. 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 0.7x, along with a 2x increase in the number of transistors, and a 1.5x increase in device performance. 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 would have 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. This has given rise to a large and diverse number of electronic systems suppliers to address the simultaneous transmission of voice, video, audio and data through both wired and wireless connections.

The capability to transmit and process information has led to both business enterprise and consumer electronic devices sharing and communicating ever larger amounts of information for many different 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 of both enterprise and consumer users increase, there has been a commensurate increase in the required amount of data storage capacity. We believe the market effects enabled by both the advances in semiconductor and communication technologies will provide a large and growing market for our products, technologies and intellectual property capabilities.

Within most modern electronic systems, in both the enterprise and consumer application domain, 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 both enterprise and consumer applications, 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.



## Table of Contents

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 this increased workload. This minimizes or eliminates the need for a costly host central processing unit ( CPU ). 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 the power consumption is critical to maximize the life of the battery. Utilizing highly integrated chips as well as chips designed to optimize power efficiency is very important for these handheld devices.

Additionally, advanced digital power management solutions that regulate the power supplied to the integrated circuits in an efficient and cost-effective manner are becoming more and more important to help reduce overall power consumption as well as the total size of the power management solution.

Given the increased sophistication of these devices, the high level of semiconductor integration, and the constant time-to-market pressures of the system manufacturers, it is becoming very important for a semiconductor manufacturer to develop a complete system level understanding of a device in order to provide optimal integration, software support and system reference designs to assist in timely product development.

## Our Markets and Products

We target computers, communications-related equipment and consumer devices that require the benefits of highly integrated mixed-signal devices for high-speed data storage, transmission and management. We also target a broad range of electronic products that can utilize our power management solutions. Additionally, we are developing new products that are targeted for new markets that we currently do not serve.

Our current product offerings are primarily in three broad end markets: mobile and wireless, storage, and networking.

	January 29, 2011		Fiscal Years Ended			January 31, 2009	
			January 30, 2010		(in millions, except for percentages)		
Mobile and Wireless	\$ 1,124	31%	\$ 532	19%	\$ 726	25%	
Storage	1,651	46%	1,575	56%	1,463	50%	
Networking	683	19%	596	21%	591	20%	
Other	154	4%	105	4%	171	6%	
Total	\$ 3,612		\$ 2,808		\$ 2,951		

## Mobile and Wireless

### Communications Processors

Our communications processors are highly integrated cellular SoC devices that enable mobile handset developers to address dual-mode EDGE, WCDMA (3G) and TD-SCDMA (China 3G) mobile network standards. Our communications processors incorporate a high-performance multi-band baseband modem processor and our application processor in a highly integrated, low-power SoC platform for voice and computation-intensive mobile data applications. Our family of communications and applications processors is based on our ARM-compliant micro-architecture, thus allowing for software compatibility across our entire cellular product portfolio enabling handset designers a faster time-to-market advantage.

The PXA920 is a single-chip solution enabling mass market availability in the TD smartphone market. This solution combines a communications processor, applications processor, power management, and radio-frequency



## **Table of Contents**

(RF) devices. In February 2011, we announced the PXA978 worldphone. The PXA 978 is a single chip solution with 3G TD-SCDMA combining GHz performance with advanced 3D graphics and 1080P multimedia. This device features Release 7, 3G UITS and TD-SCDMA with HSPA and is designed to enable handsets to be able to have access anywhere in the world on multiple networks.

### *Applications Processors*

Our ARMADA family of applications processors is designed to deliver advanced integration, leading multimedia performance, and superior power savings. The ARMADA applications processors are highly integrated SoC devices based on Marvell-designed ARM-compliant micro-architecture. Our applications processors are ideal for high-performance, low-power, space-sensitive devices enabling mobile and consumer product manufacturers the ability to integrate advanced applications within a range of power specifications to help differentiate their offerings. Each of the ARMADA family devices is optimized to meet specific end-market requirements.

The ARMADA 100 devices are targeted at the e-reader, digital picture frame and connected consumer market. The ARMADA 100 is optimized for consumer devices with medium-sized display screens, supporting integrated multimedia acceleration with WMMX2 technology, 2D graphics rendering, and up to 720p video display with performance ranging from 400 megahertz up to 1.2 gigahertz ( GHz ).

The ARMADA 500 devices are targeted at the smartbook, thin-client, computing tablet and mobile internet device market. The ARMADA 500 is optimized to deliver PC-class performance of up to 1.5GHz at a fraction of the power consumption. The devices integrate hardware capabilities including high-definition 1080p video decoding, an embedded 3D graphics processing engine supporting 15 million triangles per second rendering, and a host of PC-class user interfaces including serial advanced technology attachment ( SATA ), USB 2.0, peripheral connect interface ( PCI ) Express and Gigabit Ethernet ( GbE ).

The ARMADA 600 devices are targeted at smartphones, mobile gaming, portable media players and mobile personal information appliances market. The ARMADA 600 is optimized to provide up to 1GHz while consuming very low power providing extended battery life. The devices integrate multiple advanced hardware blocks including a powerful 3D graphics engine supporting 45 million triangles per second rendering, a hardware implemented 1080p encode/decode engine supporting MPEG-4, H.264, VC-1 and On-2 specifications, and a host of advanced mobile device interfaces including MIPI controller, NAND flash and DDR memory controllers, USB 2.0, and LCD controller.

The ARMADA 1000 devices are targeted at next-generation consumer video devices including Blue-ray players, digital TV, advanced media players and set-top-box applications market. The ARMADA 1000 is designed around a Marvell-designed dual-core ARMv7 CPU, with each core independently delivering performance up to 1.2GHz. The devices integrate a dual channel, high definition multi-format decoding processor in conjunction with Marvell's award-winning QDEO video post processing engine, along with a full suite of integrated peripherals including dual-SATA interfaces, DDR2/3 and NAND memory controllers, FastEthernet, USB2.0, HDMI and PCI Express (PCIe ).

Recently we introduced Kinoma, which serves as an open software platform for building the user interface for digital devices. Device manufacturers can use Kinoma as a starting point for their own digital devices, customizing and enhancing as necessary to achieve their product goals. Kinoma includes a modern framework for creating high performance, network connected, media rich applications. An improved integrated solution should allow developers and system integrators to more easily take advantage of the powerful underlying hardware.

Through a comprehensive ecosystem comprised of third party providers of communications and applications processors, tools and support, we assist select ecosystem partners in their platform solutions development, which can speed up the time-to-market for cellular, mobile and next-generation consumer devices.

## **Table of Contents**

All of the ARMADA applications processors provide extensive support to operating systems, including Linux, Android, Windows Mobile, Windows CE, Flash 10 and industry standard application processing interfaces such as OpenMAX, OpenGL and OpenVG.

### *Wireless*

We sell both standalone wireless products as well as combination devices which incorporate wireless, Bluetooth and FM radio capability ( personal area networking products ).

The Avastar multi-function wireless networking family of highly integrated wireless products is targeted at consumer electronics devices including tablets, handsets, digital TV, blu-ray players, digital media adapters, gaming consoles, portable media players, e-readers, printers, digital cameras, smartbooks, laptops, service provider gateways, consumers and enterprise access points and next-generation consumer devices. The Avastar devices are Institute of Electrical and Electronics Engineers ( IEEE ) 802.11n solutions based around our intellectual property supporting up to three spatial stream configurations, which support wireless data transmission rates between 150 Megabits per second ( Mbps ) to 450 Mbps, in both the 2.4GHz and 5GHz bands. We offer highly integrated, low-power wireless devices, which combine our IEEE 802.11n wireless local area network ( WLAN ) core with a Bluetooth 4.0 enhanced data rate, high speed, low energy core, in addition to a world-wide FM radio transceiver. These products support simultaneous use of Wi-Fi, Bluetooth and FM applications, ideally suited for the low power requirements of any mobile devices. By harmonizing the interaction of an integrated, shared radio frequency front-end with effective silicon arbitration techniques and intelligent software, Avastar devices deliver best-in-class radio coexistence. In addition, in February 2011, we announced the Avastar 8797, a multi-function MIMO device, which is the preferred solution for any products requiring high, dependable through-put for applications such as videos. The Avastar family also includes the ability to simultaneously act as a full featured 802.11n access point while connected to an existing network. The devices also have an integrated WLAN authentication and privacy infrastructure hardware engine supporting SMS4 encryption to address the needs of the expanding market in China.

### *Storage Products*

We offer a broad range of storage products targeted for hard disk drives, tape drive electronics, optical disk drives, solid-state flash drives hybrid drives, and storage subsystems technology. We offer both discrete components targeted at specific storage-class requirements, as well as complex SoC solutions, which integrate multiple functional blocks onto a single device. Our integrated drive electronics platform is a flexible SoC solution that provides increased performance, reduced power consumption and cost savings essential for next-generation hard disk drives. We provide storage SoC solutions for enterprise, desktop and mobile storage systems.

Utilizing our leading-edge read channel devices as the core for integration, we have the flexibility to either add any number of functional blocks available in our portfolio or to integrate customer provided intellectual property. With our high data transfer rates, our advanced SoC platform provides solutions that have the ability to span multiple product generations, allowing for product life cycle risk-reduction, lower cost of ownership and accelerated time-to-market. Our current SoC products incorporate the read channel, hard disk controller ( HDC ), embedded memory and one or more Marvell designed ARM-microprocessors into a single integrated circuit.

*Tape Drive Controllers:* Our solutions provide our tape drive customers with Small Computer System Interface ( SCSI ), serial attached SCSI ( SAS ) and Fibre Channel I/O interfaces. These devices contain integrated reduced instruction set computer ( RISC ) processors, buffer controller, direct memory access and a microprocessor interface.

## **Table of Contents**

*Read Channel:* A read channel is a mixed-signal integrated circuit that provides the interface between the analog signals stored on magnetic disk drives and the digital signals that computers can understand and manipulate. The performance of the read channel is a key factor to the overall performance of the hard disk drive storage system. Read channel performance is measured as a function of the signal-to-noise ratio ( SNR ). The higher the SNR value of a read channel circuit, the better the circuit is able to separate valid data from system induced noise. Our ability to consistently develop multiple generations of read channel circuits with industry leading SNR performance has enabled our customers to improve finished drive yields and to yield higher density drives given a fixed aerial density platter.

In the development of our read channel products we utilize advanced mixed-signal and digital signal processing technologies. Our read channel devices utilize a variety of advanced signaling algorithms including advanced partial response maximum likelihood or the low density parity check ( LDPC ) algorithm. We anticipate the majority of our future storage SoC solutions for high-density drives will be based on LDPC read channel technology. Our technology incorporates an efficient data-encoding scheme in addition to advanced digital filtering and data-detection techniques. Our read channel products are designed to allow customers to achieve high areal density in addition to fast data transfer rates for their hard disk drives. Our read channels utilize custom digital and analog blocks running at a very high frequency while achieving low power consumption.

*Hard Disk Controller:* A HDC is an integrated circuit that provides high performance input/output ( I/O ) interface control between the hard disk drive read channel, servo motor controller and the host system. The HDC consists of a buffer controller, multi-core ARM-based CPUs, a disk formatter and host bus interface. We support a variety of host system interfaces, including SATA, SAS and Fibre Channel. These host bus interfaces can support data transfer rates of 1.5 Gigabits per second ( Gbps ) scalable up to 6 Gbps.

*Solid-State Drive Controllers:* Our solid-state drive ( SSD ) controllers are targeted at the growing market for SLC or MLC NAND flash-based storage systems, both for the enterprise and consumer client market. Our SSD controllers leverage significant portions of intellectual property and software developed for the hard disk drive market, including our SAS, SATA and PCIe, our embedded ARM-based CPUs and data formatting logic. Additionally, we incorporate unique intellectual property, which address wear-leveling algorithms required to assure stable device operation.

In addition to traditional SSD s, we have leveraged our technology leadership in SSD controllers and have developed a family of SSD controller-based solutions designed for the smartphone end market.

*Hybrid Drive Controllers:* A hybrid drive controller is designed to leverage the low cost of a HDC with the performance of a SSD. In the fourth quarter of fiscal 2011, we introduced a 6 Gbps per second SATA controller powered by our HyperDuo technology. This solution can control both an HDC and a SSD to create a low-cost, high capacity drive using a small amount of flash memory to boost performance.

*Storage-System Products:* Our storage system solutions leverage our proprietary 6Gbs SAS intellectual property and address the market for enterprise-class redundant array of inexpensive disks ( RAID ), value-class RAID and complex storage area network solutions. Our storage system products enable customers to manage and aggregate data from arrays of multiple hard disk drives or from multiple servers. Our portfolio of storage system solutions includes devices which convert data from multiple formats (SATA to SAS, PCIe to SAS), devices which aggregate up to 24 individual ports of lower bandwidth SAS or SATA formatted data and consolidates this data into high bandwidth 6 Gbps streams.

## **Table of Contents**

### *Networking*

#### *Switching Products*

We have a broad portfolio of switching solutions for the enterprise networking, carrier access and small office/home office/residential networking markets. Our switching products enable voice, video, and data traffic to be seamlessly carried through the network with full fidelity. Additionally, we are supporting the increased usage of packet-based Internet Protocol communications of real-time traffic such as telephony and video-on-demand.

The Prestera architecture is our eighth generation of Ethernet-based switching solutions. The Prestera product family is designed to enable system manufacturers to build a wide range of products that address high-density Gigabit and 10GbE solutions for various network topologies, accommodating varying bandwidth requirements, including wide area networks ( WANs ), metropolitan area networks ( MANs ), enterprise networks, and small-and-medium size business networks. Using the Prestera switching architecture, manufacturers can introduce high-performance, feature-rich and cost-effective products that not only meet today's market needs but also provide a scalable platform for future requirements.

The Prestera MX multi-layer switching family of products are fully integrated 10GbE, 1GbE and 100 Megabits per second ( Mbps ) Fast Ethernet wire-speed configurable devices targeted at metropolitan edge and access systems in service provider networks. The Prestera MX devices target MAN switching applications, including Layer 2/3 switching, Layer 2 to Layer 5 traffic classification for millions of flows, wire-speed access control lists, traffic policing and shaping, longest prefix match, network address translation and Multi-Protocol Label Switching functions.

The Prestera EX family of packet processors is designed to deliver multi-layer enterprise switching to drive GbE to the desktop with exceptional price and performance ratios and industry-leading features. The Prestera EX family is designed to provide a complete line of Fast Ethernet, GbE and 10GbE switching solutions with 100% software compatibility.

The Prestera DX family of packet processors offers integration and performance targeted at desktop GbE switches in small-and-medium size business networks. The Prestera DX packet processors are designed to enable system vendors to design affordable, plug-and-play, high-density, standalone switches, which address the cost-sensitive unmanaged and lightly managed desktop switching market.

The Prestera CX family of packet processors was introduced and it addresses the high density 10Gigabit solutions for new generation of datacenters and optical broadband. The Prestera CX switching product family offers fully integrated 100GbE and 40GbE devices. The first Prestera CX family is based on a configurable 480 Gbps packet processing engine, which can support up to 48 ports of 10GbE on a single chip, as well as being configurable to support multiple 40GbE ports. This enables applications, such as server virtualization, cloud computing and software, as a service.

The family of fabric processors and crossbar switch fabrics offers the ability to expand and scale network topologies, which leverage the Prestera DX packet processors. The switch fabric processors are single-chip traffic managers with an integrated crossbar and Serializer-Deserializer ( SERDES ) targeted for low cost, high-performance scaling of stackable and chassis-based systems in data centers, multi-tenant buildings and enterprise wiring closets.

Our integrated LinkStreet family of 10/100 Fast Ethernet and Gigabit switches support from three to 11 ports. Our LinkStreet products are targeted to address the small office/home office Ethernet switch market, where cost, ease-of-use, and flexibility are of paramount importance. These integrated switch products can reduce design complexities and time-to-market barriers typically associated with switch development. The small office/home office switches with integrated transceivers incorporate advanced features such as smart power

## **Table of Contents**

management, which dramatically reduces power consumption by more than 50%, and Virtual Cable Tester ( VCT ) technology, which performs cable diagnostics to reduce overall network support costs. Support for emerging technologies, such as Audio Video Bridging ( AVB ) and Energy Efficient Ethernet ( EEE ), further enhance the LinkStreet family. With these enhanced features, these switches are targeted at applications such as standalone switches, media converters, IP phones, firewall appliances, wireless and wired gateway routers and wireless access points.

Our LinkStreet family of highly integrated, 100Mbps full-wire-speed gateway devices is designed for small-and-medium size businesses, small office/home office and residential gateway routers. LinkStreet is a gateway family of single chip, mixed-signal SoC devices, which includes a high performance ARM-based embedded microprocessor plus a multi-port 100Mbps Fast Ethernet switch, media access controller ( MAC ) and PHY interface in addition to built-in VCT cable diagnostics capability to reduce overall network support costs. These devices include integrated peripheral interfaces, such as USB, Secure Digital Input Output, and Time-division Multiplexing. Additionally, the newer devices in this family also support emerging technologies, such as AVB and EEE. These LinkStreet products include comprehensive hardware reference designs with the latest firewall capabilities to isolate and protect WAN and local area networks ( LANs ) from virus intrusion and software development kits enabling lower cost of development and faster time to market for the design of combined wired and wireless gateways.

### *Communications Controller and Embedded Processor Products*

We have a broad offering of high performance and highly integrated system control-plane communication controllers and fully integrated embedded processors. These devices offer both integrated embedded CPU technology as well as variants that can support discrete embedded RISC microprocessors. Our devices are used in a broad range of applications including routers, switches, digital subscriber line access multiplexers, access concentrators, wireless base stations, VoIP gateways and storage area networks.

Our Discovery Innovation series is a complete SoC solution based on our embedded CPU technology. By leveraging our Discovery system controllers and deep expertise in ARM instruction-set-compliant CPUs, the Discovery Innovation SoCs offer one of the highest levels of integration in the industry. The 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.

Our high-performance Discovery system controllers support MIPS and PowerPC CPU-based communication systems. Our controllers are used in systems developed by leading original equipment manufacturers ( OEMs ) for the Internet infrastructure. These include enterprise switches, LAN to WAN edge routers, enterprise routers, access concentrators, telecom equipment and laser printers. Our system controllers contain all of the key control blocks needed to build high-performance 32-bit and 64-bit CPU subsystems, including a DRAM controller, a peripheral device controller, direct memory access engines, timers, PCI and interrupt controllers. These system controllers are designed to provide system designers with the ability to match their CPU performance to the targeted overall system price/performance. Our portfolio Discovery system controllers are generally software-compatible with older generations, thereby supporting faster time-to-market, lower product development risk and lower cost of ownership due to the re-use of system software, which might otherwise need to be re-developed.

The Kirkwood product family is the third generation of our highly integrated embedded processor SoC. The Kirkwood family is based on our embedded CPU technology, providing users with single and dual-CPU cores, which have been highly optimized to maximize the overall computing performance while simultaneously lowering total device power consumption. Purposely built to address the needs for network connected consumer electronic equipment, this family provides the performance, flexibility, interfaces and price points that fit the needs of the digital economy. Applications for Kirkwood SoCs include home gateways, set-top boxes, network storage, printers, media players and point-of-service terminals.

## **Table of Contents**

In fiscal 2011, we announced ARMADA XP (Extreme Performance), a quad-core processing, enterprise-class cloud computing platform. This platform integrates four Marvell designed ARM-compliant 1.6Hz CPU cores along with a host of input/output ( I/O ) peripherals to offer one of the highest levels of integration in the industry. By employing an advanced design methodology and process technology, the ARMADA XP is optimized to consume low power while delivering the best performance-per-watt- to empower emerging cloud computing applications ranging from high performance networking and web servers to high volume home server products like Network Attached Storage and media servers. In cloud computing environments, mobile servers like those powered by ARMADA XP are the key link in a seamless, unified ecosystem of mobile connected devices, information appliances and smart home appliances.

Our AVANTA family provides solutions for next generation broadband, based on Ethernet and Passive Optical Network architecture. It consists of a highly integrated Gateway-on-a-chip solution, leveraging key Marvell technologies for Universal Passive Optical Networking, Ethernet and packet processing, voice processing, power management and application processors. AVANTA is meant to meet the needs of next generation Internet which is driving massive bandwidth growth to the digital home requiring high performance along with uncompromised quality for interactive services such as video, online gaming or conferencing. The AVANTA product supports triple modes for internet access using either Ethernet Passive Optical Network, Gigabit Passive Optical Network or Ethernet mode, making these products universal for any broadband optical network, as well as leveraging economies of scale for developers and service providers.

### *Enterprise Transceiver and Ethernet Connectivity Products*

We offer a portfolio of low power, high-performance PHY, LAN on Motherboard ( LOM ) and network interface card solutions for demanding network connectivity applications. These products are designed to support IEEE, new high-speed serial interfaces, security capabilities like MAC security ( MACSec ) and Time-aware Ethernet capabilities like Precision Time-stamping Protocol. We provide these products to the enterprise networking, storage networking, PC connectivity, gaming and other consumer electronics markets.

Our Alaska GbE PHY products and Alaska X 10G 10G PHY products consist of a broad portfolio of products that address many different applications and markets. Enterprise switching, Server and telecom applications are addressed with high performance, low power and highly integrated PHY products. Network connectivity for client systems like PCs, gaming systems and digital TVs are addressed with cost-effective and lower-power PHY and LOM products.

Our GbE transceivers, targeted at enterprise and telecom networking systems, offer high performance, low power dissipation and value-added features. Each member of the product family is based on our industry-leading intellectual property in the DSP and analog domain. These products enable seamless data transmission over either copper or fiber-optic cabling. The design of the Alaska family of products incorporates sophisticated digital signal processing algorithms and power management techniques to achieve high data transmission quality and low power dissipation. These transceivers support IEEE to optimize system energy consumption, MACSec to enhance network security and Precision Time-stamping Protocol to enable easy migration to Ethernet from time-based networks. All these devices also support our VCT technology, which allow end users to quickly and remotely analyze the signal quality and attributes of the data transmission cable, which can significantly reduced installation time and cable debugging efforts.

Our transceivers target client connectivity applications for gaming, digital TV and other consumer electronics systems. Our 100 Mbps Fast Ethernet physical layer products offer low power dissipation, IEEE, small form factor and advanced features.

Alaska X 10 Gbps and backplane transceiver products are the evolutionary extension of our GbE transceiver technology. This family of products enables the accelerated deployment of 10GbE-capable systems for the LAN, MAN and WAN markets. The Alaska X transceiver family features robust operation, low power consumption, high performance and small form factor. Our 10GbE products offer value-add features, such as MACSec, and are targeted at Enterprise as well as Telecom applications.



## **Table of Contents**

Our Yukon connectivity products are targeted for the volume deployment of Gigabit Ethernet PC-client and server network connectivity solutions. The Yukon family of integrated, single-chip solutions is based on our proven enterprise-class Alaska family of GbE MAC, PHY interface and associated comprehensive software suite. The Yukon devices are offered in an ultra-small form factor with low-power and EEE requirements, and are targeted for client and server network interface cards and LOM applications for both traditional PCI bus and PCIe architectures. The Yukon products provide a wide variety of manageability features such as VCT technology, which reduces network installation and support costs, and is optimized for 32-bit PCI clients. With a low pin count for such a device, the Yukon product is designed to minimize board space, simplify signal routing and reduce the number of required printed circuit board layers with the goal of a cost-effective motherboard and low profile network interface card implementation.

### ***Other Products***

#### ***Printing ASIC products***

We offer custom and semi-custom SoC products aimed at the printer market. These devices are the core integrated circuits for image processing and the control of laser printers, inkjet printers and all-in-one products incorporating printing, scanning, networking, wireless and fax capabilities. We also provide printer control systems based on Marvell Printing ASICs aimed at offering highly integrated solutions and shorter time-to-market.

#### ***Digital Video Processing Products***

Our digital video format converter with award-winning QDEO video processing converts PC graphics, standard-definition and high definition video into 1080p high definition outputs, removing signal noise and image artifacts. Three generations of video format converters are now in mass production. The Marvell 88DE2710, 88DE2750 and the 88DE27555 digital video format converters are now shipping in blue-laser players and recorders, set-top-boxes, and A/V receivers and are also targeted at digital television and media clients.

#### ***Power Management and Green Technology Products***

DSP Switcher integrated regulators are designed to provide efficiency, precision and transient response together with small solution size to provide system designers with enhanced form factor and battery life in portable equipment. The integration of power metal-oxide semiconductor field-effect transistors, internal frequency compensation and single resistor output programming reduces design efforts and increases system reliability.

Our analog switching regulators are low-cost, highly integrated power management solutions. Our analog switching regulators are available as single or multiple output devices allowing for design flexibility for our customers. These solutions feature low quiescent current, high efficiency, high switching frequency, and integrated compensation circuits which reduce the external components, system board area and cost.

Our mixed-signal light-emitting diode ( LED ) drivers provide AC-DC and DC-DC power solutions for LED general lighting applications. With our smart LED driver technology, the adaptive digital algorithms implemented on the chip determine the amount of power required and optimize operations on various environmental conditions, achieving high efficiency, high power factor correction (for AC-DC) and fine light dimming control. The high integration of digital logic and power analog reduces system cost and board space, and also improves system reliability.

We have also developed a smart energy platform to enable solutions for energy management applications, such as smart appliances and networked lighting. This platform is based on our wireless networking, the ARMADA processor and power management chips, and a complete smart energy software suite. This solution can be used to develop various energy saving products with smart grid connectivity, such as wireless thermostats, smart dishwashers, smart refrigerators, smart water heaters and wireless lighting controls.

## **Table of Contents**

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 the 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**

Our direct sales force targets markets that have high intensity data communications processing and high performance storage requirements. 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 stocking representatives outside of the United States for some of our products. We expect a significant percentage of our sales will continue to come from direct sales to key customers. As we expand into other end markets, we will evaluate the best sales channel to service that business.

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 with 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 customers for our storage products are manufacturers of hard disk and solid state drives 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 WANs, MANs and LANs, 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 cellular and applications processor products are manufacturers of cellular handsets, tablets, personal navigation devices and a large variety of other handheld, portable consumer applications. Our target customers for our wireless and personal area networking products include manufacturers of WLAN 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 cellular handsets, gaming devices, PDAs and home entertainment multimedia client devices.

The target customers for our digital video processing products include manufacturers of consumer electronic devices, such as digital televisions, 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.

A small number of customers have historically accounted for a substantial portion of our revenue. Two customers accounted for more than 10% of our revenue. Western Digital represented approximately 21%, 24% and 21% of our net revenue in fiscal 2011, 2010 and 2009, respectively. Research in Motion represented approximately 14% of net revenue in fiscal 2011 and less than 10% of net revenue in fiscal 2010 and 2009. During fiscal 2010, Toshiba acquired the hard disk drive operations of Fujitsu. Although Toshiba and Fujitsu

## **Table of Contents**

revenue have not historically accounted for more than 10% of our revenue, we have combined fiscal 2010 net revenue for both Toshiba and Fujitsu together for reporting purposes based on Toshiba's acquisition of Fujitsu's hard disk drive operations in fiscal 2010. Toshiba represented less than 10% of net revenue in fiscal 2011 and fiscal 2009 and approximately 15%, of our net revenue in 2010. Our sales are made under purchase orders typically received between one week 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 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.

An increasing number of our products are being incorporated into consumer electronics products, including gaming devices, which are subject to significant seasonality and fluctuations in demand. Due to holiday and back to school buying trends, these seasonal demand patterns generally will 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.

### **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, a significant portion of our revenue is related to inventory pulled by customers from 3<sup>rd</sup> party logistics providers. As such, this revenue would not be included in the backlog.

### **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 core intellectual property technology 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 products 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 expect that we will continue to invest, significant funds for research and development. Our research and development expense was \$897.6 million, \$828.2 million and \$935.3 million in fiscal 2011, 2010 and 2009, respectively.

### **Manufacturing**

#### ***Integrated Circuit Fabrication***

The vast majority of our integrated circuits are substantially 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, with the remaining manufacturing outsourced to other foundries.

## **Table of Contents**

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, sub-micron manufacturing processes. 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 Singapore, Malaysia, Korea, Taiwan and China, Global Testing Corporation in Singapore, Siliconware Precision Industries in Taiwan, ASE Electronics in Singapore, Taiwan and Malaysia, and Amkor in Korea, Philippines and Taiwan.

### ***Quality Assurance***

We are certified to the International Organization for Standards Quality Management ISO 9001:2000 level. 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 monitor the environmental impact of our products. The need for lead-free solutions in electronic components and systems has received increasing attention within the semiconductor industry and many companies are moving towards becoming compliant with the Restriction of Hazardous Substances Directive ( RoHS ), the European legislation that restricts the use of a number of substances, including lead. We believe that our current products are compliant with the RoHS Directive.

### ***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, develop similar technology independently 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 January 29, 2011, we have been issued and/or have acquired over 1,800 U.S. patents and over 500 foreign patents and we have more than 3,000 U.S. and foreign pending patent applications on various aspects of our technology, with expiration dates ranging approximately from 2011 to 2031, 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

## **Table of Contents**

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.

## **Competition**

The markets for our products are intensely competitive, characterized by rapid technological change, evolving standards, short product life cycles and pricing pressures imposed by high-volume customers. We expect competition to intensify as current competitors expand 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 of new industry standards;

ability to obtain adequate foundry capacity; and

number and nature of our competitors in a given market.

Our current products face competition from a number of sources. We believe that our principal competitors for our read channel and storage SoC devices are LSI Corporation and, to a lesser extent, Renesas, STMicroelectronics and other new entrants. Our solid state storage products compete primarily against devices offered by Sandforce and devices internally developed by flash manufacturers. Our tape drive controller products compete primarily against devices internally developed by tape drive manufacturers.

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Our switching products compete primarily against products from Broadcom. To a lesser extent, these products also compete with Realtek Semiconductor and Vitesse Semiconductor. Our communications controllers and embedded processors compete directly with products from companies such as Cavium Networks, Freescale

## **Table of Contents**

Semiconductor and NetLogic Microsystems. Our transceiver and connectivity products compete primarily with products from Broadcom, Intel, NetLogic Microsystems, LSI Corporation, Realtek Semiconductor, Atheros and Vitesse Semiconductor. Our powerline communications products compete primarily with products from Atheros and Broadcom.

Our communications and applications processors compete against products from Broadcom, Freescale Semiconductor, Nvidia, Qualcomm, STMicroelectronics and Texas Instruments. Our wireless LAN and personal area network products compete primarily against products from Broadcom. Our embedded wireless products compete with products from Atheros, Realtek and Texas Instruments.

Our printing ASIC products compete primarily with products from PMC Sierra and ST Microelectronics.

Our power management products compete with products from a number of companies including Analog Devices, International Rectifier, Intersil Corporation, Linear Technology, Maxim Integrated Products Incorporated, National Semiconductor and Texas Instruments.

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 average unit selling prices of our products, we will need to continue to reduce the cost of our products. We intend to accomplish this by implementing design changes that lower the cost of manufacturing, assembling and testing, by entering into long-term, strategic arrangements with our foundry partners to secure wafer capacity at reduced prices, by negotiating reduced charges from our foundries. 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 January 29, 2011, we had a total of 5,893 employees.

**Table of Contents****Executive Officers of the Registrant**

The following table shows information about our executive officers as of January 29, 2011:

<b>Name</b>	<b>Age</b>	<b>Position(s)</b>
Dr. Sehat Sutardja	49	President, Chief Executive Officer and Chairman of the Board
Clyde R. Hosein	51	Chief Financial Officer and Secretary
Dr. Pantas Sutardja	48	Vice President, Chief Technology Officer, Chief Research and Development Officer and Director

*Dr. Sehat Sutardja*, one of our co-founders, has served as the President, Chief Executive Officer and Co-Chairman of our Board of Directors since 1995, and Chairman of our Board of Directors since 2003. While remaining deeply involved in the daily challenges of running a global growth company, Dr. Sutardja participates heavily in Marvell's engineering and marketing efforts across analog, video processor, and microprocessor design while offering input across all of our other product lines. Dr. Sehat 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 150 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 has become an internationally-recognized proponent of new energy efficiency standards for consumer electronics. To that end, he has been working with the governments in both the U.S. and China to establish efficiency performance standards that could produce significant cost and carbon savings. Dr. Sutardja holds a MS and Ph.D. in Electrical Engineering and Computer Science from the University of California at Berkeley. Dr. Sehat Sutardja received a BS in Electrical Engineering from Iowa State University. Dr. Sehat Sutardja is the brother of Dr. Pantas Sutardja.

*Clyde R. Hosein* has served as our Chief Financial Officer since June 2008 and our Corporate Secretary since September 2008. Mr. Hosein served as our Interim Chief Operating Officer from October 2008 to March 2010. From March 2003 until June 2008, Mr. Hosein served as Chief Financial Officer for Integrated Device Technologies, a publicly traded company that develops and delivers mixed signal semiconductor solutions to the communications, computing and consumer end markets. From 2001 until 2003, Mr. Hosein served as Chief Financial Officer of Advanced Interconnect Technologies. From 1997 to 2001, Mr. Hosein was the Chief Financial Officer and senior director of corporate planning of Candescant Technologies Corporation. Previous to Candescant, Mr. Hosein spent over 14 years with IBM Corporation, where he held several engineering and financial positions within their storage, microelectronics, data systems and corporate divisions. Mr. Hosein serves on the board of directors of Cree Inc., a publicly traded company that develops and manufactures LED products. Mr. Hosein holds an MBA from New York University Stern School of Business and a BS in industrial engineering from Polytechnic University in New York.

*Dr. Pantas Sutardja*, one of our co-founders, has served as Vice President and a director since our inception 1995. Dr. Pantas Sutardja was appointed Chief Technology Officer in 2000 and Chief Research and Development Officer in August 2007. Dr. Pantas Sutardja served as our Acting Chief Operating Officer from September 2007 until June 2008. Dr. Pantas Sutardja holds a BS, MS and Ph.D. in Electrical Engineering and Computer Science from the University of California at Berkeley. Dr. Pantas Sutardja is the brother of Dr. Sehat Sutardja.

**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. If any of the possible adverse events described below actually occurs, we may be unable to*



## **Table of Contents**

*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:

general economic and political conditions and specific conditions in the markets we address, including the continuing volatility in the technology sector and semiconductor industry, and current general economic volatility;

our dependence on a few customers for a significant portion of our revenue;

cancellations, rescheduling or deferrals of significant customer orders or shipments;

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

gain or loss of a key customer or design win;

our ability to develop and introduce new and enhanced products in a timely and effective manner;

our ability to maintain a competitive cost structure for our manufacturing and assembly and test processes;

failure to qualify our products or our suppliers' manufacturing lines;

our ability to exercise stringent quality control measures to obtain high yields;

our ability to successfully transition to smaller geometry process technologies or achieve higher levels of design integration;

effective and timely update of equipment and facilities as required for leading edge production capabilities;

our ability to attract and retain highly skilled managerial, engineering, sales and marketing personnel;

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

our ability to anticipate and adapt to changes in technology and evolving industry standards and our customers' changing demands;

failure to protect our intellectual property; and

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.

Due to fluctuations in our quarterly results of operations and other factors, the price at which our common shares will trade is likely to continue to be highly volatile. The closing sale price of our common shares on the NASDAQ Global Select Market for the period of January 1, 2009 to January 29, 2011 ranged from a low of \$5.80 to a high of \$22.58. In future periods, if our revenues or operating results are below our estimates or the estimates or expectations of public market analysts and investors, amongst other factors, could result in our stock price declining. On average, technology companies have been subject to a greater number of securities class action claims than companies in many other industries as a result of stock price volatility. If our stock price is volatile, we may become involved in this type of litigation. Any litigation could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business.

## **Table of Contents**

***Our business, financial condition and results of operations may be adversely impacted by global economic conditions, which may cause a decline in the market price of our common shares.***

We operate in the semiconductor industry, which is cyclical and subject to rapid change and evolving industry standards. From time to time, this industry has experienced significant demand downturns. These downturns are characterized by decreases in product demand, excess customer inventories and sometimes accelerated erosion of prices. These factors could cause substantial fluctuations in our net revenue, gross margin, cash flows and results of operations. In addition, during these downturns some competitors may become more aggressive in their pricing practices, which would adversely impact our gross margin. Any downturns in the current environment may be severe and prolonged, and any failure of the markets in which we operate to fully recover from downturns could seriously impact our revenue and harm our business, financial condition and results of operations. The semiconductor industry is also subject to periodic increases in demand and supply constraints, which may affect our ability to ship products. Accordingly, our results of operations may vary significantly as a result of the general conditions in the semiconductor industry, which could cause fluctuations in our stock price.

The global credit and financial markets have experienced and in some cases continue to experience extreme volatility and disruptions, including severely diminished liquidity and credit availability, increased concerns about inflation and deflation, decreased consumer confidence, lower economic growth, volatile energy costs, increased unemployment rates, and uncertainty about economic stability. We cannot predict the timing, strength or duration of any economic slowdown or subsequent global economic recovery in the hard disk drive or in the semiconductor industry. If the economy or markets in which we operate deteriorate from current levels, our business, financial condition and results of operations will likely be materially and adversely affected. Additionally, the combination of our lengthy sales cycle coupled with challenging macroeconomic conditions could adversely impact our results of operations.

***A significant portion of our business is dependent on the hard disk drive industry, which is highly cyclical, experiences rapid technological change, is subject to industry consolidation and is facing increased competition from alternative technologies.***

The hard disk drive industry is intensely competitive, and the technology changes rapidly. This industry has historically been cyclical, with periods of increased demand and rapid growth followed by periods of oversupply and subsequent contraction. These cycles may affect us because some of our customers are participants in this industry.

Hard disk drive manufacturers tend to order more components than they may need during growth periods, and sharply reduce orders for components during periods of contraction. Rapid technological changes in the hard disk drive industry often result in shifts in market share among the industry's participants. If the hard disk drive manufacturers using our products do not retain or increase their market share, our sales may decrease.

In addition, the hard disk drive industry has experienced consolidation over the past several years. For example, during fiscal 2010, Toshiba acquired the hard disk drive operations of Fujitsu, and in March 2011, Western Digital announced that it plans to purchase Hitachi's hard disk drive unit. As a result of the consolidation among our customers, this could lead to reduced demand for our products, replacement of our products by the merged entity with those of our competitors and cancellation of orders, each of which could harm our results of operations. On the other hand, this could lead to increased opportunities for our products within the combined company due to our technology advantage and customer relationships.

Future changes in the nature of information storage products could reduce demand for traditional hard disk drives. For instance, products using alternative technologies, such as solid-state flash drives and other storage technologies could become a significant source of competition to manufacturers of hard disk drives. Flash memory has typically been more costly than disk drive technologies. However, flash memory manufacturers have been reducing the prices for their products, which could enable them to compete more effectively with hard

## **Table of Contents**

disk drive products. While we also supply controllers for solid state drives, demand for hard disk drives could be reduced if alternative storage technologies, such as flash memory, can meet customers' cost and capacity requirements while not using our technology.

***We operate in the intensely competitive mobile and wireless communications markets, and our failure to compete effectively could harm our results of operations.***

The semiconductor industry and specifically the mobile and wireless communications markets are extremely competitive, and we expect competition to intensify as current competitors expand their product offerings and new competitors enter the market. We currently compete with a number of large domestic and international companies in the business of designing integrated circuits and related applications, some of which have greater financial, technical and management resources than us. We expect competition to continue to increase as industry standards continue to evolve and become better known, and others realize the market potential of wired and wireless products and services. As the markets we compete in continue to increase, our revenues and gross margins may be harmed. For example, competitors with greater financial resources may be able to offer lower prices than us, or they may offer additional products, services or other incentives that we may not be able to match. In addition, many of our competitors operate and maintain their own fabrication facilities and have longer operating histories, greater name recognition, larger customer bases, and greater sales, marketing and distribution resources than we do. Furthermore, our current and potential competitors in the mobile and wireless markets 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, new competitors or alliances among these competitors may acquire significant market share, which would harm our business. We cannot assure you that we will be able to continue to compete successfully against existing or new competitors, which would harm our results of operations.

***Our sales are concentrated in a few customers, and if we lose or experience a significant reduction in sales to any of these key customers, our revenues may decrease substantially.***

We receive a significant amount of our revenues from a limited number of customers. For the year ended January 29, 2011, two customers accounted for a total of approximately 35% of our net revenue. Sales to our largest customers have fluctuated significantly from period to period primarily due to the timing and number of design wins with each customer, as well as the continued diversification of our customer base as we expand into new markets, and will likely continue to fluctuate dramatically in the future. The loss of any of our large customers or a significant reduction in sales we make to them would likely harm our financial condition and results of operations. Our operating results in the foreseeable future will continue to depend on sales to a relatively small number of customers, as well as the ability of these customers to sell products that incorporate our products. In the future, these customers may decide not to purchase our products at all, purchase fewer products than they did in the past, or alter their purchasing patterns in some other way, particularly because:

substantially all of our sales are made on a purchase order basis, which permits our customers to cancel, change or delay product purchase commitments with little or no notice to us and without penalty;

our customers may develop their own solutions;

our customers may purchase integrated circuits from our competitors; or

our customers may discontinue sales or lose market share in the markets for which they purchase our products.

***If we are unable to develop and introduce new and enhanced products that achieve market acceptance in a timely and cost-effective manner, our results of operations and competitive position will be harmed.***

Our future success will depend on our ability, in a timely and cost-effective manner, to develop and introduce new products and enhancements to our existing products. We must also achieve market acceptance for these products and enhancements. If we do not successfully develop and achieve market acceptance for new and

## **Table of Contents**

enhanced products, our ability to maintain or increase revenues will suffer. The development of our products is highly complex. We occasionally have experienced delays in completing the development and introduction of new products and product enhancements, and we could experience delays in the future. Even if new and enhanced products are introduced to the market, we may not be able to achieve market acceptance of them in a timely manner.

In addition, our longstanding relationships with some of our larger customers may also deter other potential customers who compete with these customers from buying our products. To attract new customers or retain existing customers, we may offer certain customers favorable prices on our products. If these prices are lower than the prices paid by our existing customers, we would have to offer the same lower prices to certain of our customers who have contractual most favored nation pricing arrangements. In that event, our average selling prices and gross margins would decline.

***We rely on independent foundries and subcontractors for the manufacture, assembly and testing of our integrated circuit products, and the failure of any of these third party vendors to deliver products or otherwise perform as requested could damage our relationships with our customers, decrease our sales and limit our growth.***

We do not have our own manufacturing or assembly facilities and have very limited in-house testing facilities, therefore, we rely on third party vendors to manufacture, assemble and test the products we design. We currently rely on several third party foundries to produce our integrated circuit products. We also currently rely on several third party assembly and test subcontractors to assemble, package and test our products. This exposes us to a variety of risks, including the following:

### *Regional Concentration:*

Substantially all of our products are manufactured by third party foundries located in Taiwan. Currently our alternative manufacturing sources are located in China and Singapore. In addition, substantially all of our assembly and testing facilities are located in Singapore, Taiwan, Malaysia and the Philippines. Because of the geographic concentration of these third party foundries, as well as our assembly and test subcontractors, we are exposed to the risk that their operations may be disrupted by regional disasters. For example, the risk of an earthquake in Taiwan and elsewhere in the Pacific Rim region is significant due to the proximity of major earthquake fault lines to the facilities of our foundries and assembly and test subcontractors. Taiwan has experienced significant earthquakes in the past, including, for example, in March 2010, and may be subject to additional earthquakes that could disrupt manufacturing operations. In addition, the resurgence of severe acute respiratory syndrome, the outbreak of avian flu and any similar future outbreaks in Asia, where these foundries are located, could affect the production capabilities of our manufacturers by resulting in quarantines or closures. In the event of such a quarantine or closure, if we were unable to quickly identify alternate manufacturing facilities, our revenues, cost of goods sold and results of operations would be negatively impacted. If these vendors do not provide us with high-quality products and services in a timely manner, or if one or more of these vendors terminates its relationship with us, we may be unable to obtain satisfactory replacements to fulfill customer orders on a timely basis, our relationships with our customers could suffer, our sales could decrease and harm our business, financial condition or results of operations.

### *No Guarantee of Capacity or Supply:*

The ability of each foundry to provide us with semiconductor devices is limited by its available capacity and existing obligations. In addition, when demand is strong, availability of foundry capacity may be constrained, and with limited exceptions, our vendors are not obligated to perform services or supply products 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. For example, in recent years, we experienced some supply shortages due to the difficulties encountered by the foundries in rapidly increasing their production capacities from low utilization levels to the high utilization levels required due to a rapid increase in demand. Although we have entered into contractual commitments to supply specified levels of products to some of our customers, we may not have sufficient levels

## **Table of Contents**

of production capacity with all of our foundries, despite signing an agreement with a foundry to reserve and secure foundry fabrication capacity for a fixed number of wafers. Despite this agreement, foundry capacity may not be available when we need it or at reasonable prices. We place our orders on the basis of our customers' purchase orders or our forecast of customer demand, and the foundries can allocate capacity to the production of other companies' products and reduce deliveries to us on short notice. It is possible that foundry customers that are larger and better financed than we are or that have long-term agreements with our main foundries, may induce our foundries to reallocate capacity to those customers. This reallocation could impair our ability to secure the supply of components that we need. Moreover, if any of our third party foundry suppliers are unable to secure necessary raw materials from their suppliers, lose benefits under material agreements, experience power outages, lack sufficient capacity to manufacture our products, encounter financial difficulties or suffer any other disruption or reduction in efficiency, we may encounter supply delays or disruptions, which could harm our business or results of operations.

Although we use several independent foundries to manufacture our semiconductor products, most of our components are not manufactured at more than one foundry at any given time, and our products typically are designed to be manufactured in a specific process at only one of these foundries. Accordingly, if one of our foundries is unable to provide us with components as needed, it may be difficult for us to transition the manufacture of our products to other foundries, and we could experience significant delays in securing sufficient supplies of those components. This could result in a material decline in revenues, net income and cash flow.

In order to secure sufficient foundry capacity when demand is high and mitigate the risks described in the foregoing paragraph, we may enter into various arrangements with suppliers that could be costly and harm our results of operations, such as non-refundable deposits with or loans to foundries in exchange for capacity commitments, and contracts that commit us to purchase specified quantities of integrated circuits over extended periods. We may not be able to make any such arrangement in a timely fashion or at all, and any arrangements may be costly, reduce our financial flexibility, and not be on terms favorable to us. Moreover, if we are able to secure foundry capacity, we may be obligated to use all of that capacity or incur penalties. These penalties may be expensive and could harm our financial results.

### *Uncertain Yields and Quality:*

The fabrication of integrated circuits is a complex and technically demanding process. Our foundries have from time to time experienced manufacturing defects and reduced manufacturing yields. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundries could result in lower than anticipated manufacturing yields or unacceptable performance. 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 foundries, or defects, integration issues or other performance problems in our products could cause us significant customer relations and business reputation problems, harm our financial results and result in financial or other damages to our customers. Our customers could also 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. In addition, defects in our existing or new products could result in significant warranty, support and repair costs, and divert the attention of our engineering personnel from our product development efforts.

To the extent that we rely on outside suppliers to manufacture or assemble and test our products, we may have a reduced ability to control directly product delivery schedules and quality assurance. This lack of control may result in product shortages or quality assurance problems that could delay shipments of products or increase manufacturing, assembly, testing or other costs.

### *Costs related to defective products could have a material adverse effect on us.*

We have experienced hardware and software defects and bugs associated with the introduction of our highly complex products. We cannot assure you that, despite our testing procedures, errors will not be found in new

## **Table of Contents**

products or releases after commencement of commercial shipments in the future, which could result in loss of or delay in market acceptance of our products, material recall and replacement costs, delay in revenue recognition or loss of revenues, writing down the inventory of defective products, the diversion of the attention of our engineering personnel from product development efforts, our having to defend against litigation related to defective products or related property damage or personal injury, and damage to our reputation in the industry and could adversely affect our relationships with our customers. In addition, we may have difficulty identifying the end customers of the defective products in the field. As a result, we could incur substantial costs to implement modifications to correct defects. Any of these problems could materially adversely affect us.

***If we fail to appropriately scale our operations in response to changes in demand for our existing products or to the demand for new products requested by our customers, our business and profitability could be materially and adversely affected.***

To achieve our business objectives, it may be necessary from time to time for us to expand or contract our operations. In the future, we may not be able to scale our workforce and operations in a sufficiently timely manner to respond effectively to changes in demand for our existing products or to the demand for new products requested by our customers. In that event, we may be unable to meet competitive challenges or exploit potential market opportunities, and our current or future business could be materially and adversely affected. Conversely, if we expand our operations and workforce too rapidly in anticipation of increased demand for our products, and such demand does not materialize at the pace at which we expected, the rate of increase in our costs and operating expenses may exceed the rate of increase in our revenue, which would adversely affect our results of operations. In addition, if such demand does not materialize at the pace which we expect, we may be required to scale down our business through expense and headcount reductions as well as facility consolidations or closures that could result in restructuring charges that would materially and adversely affect our results of operations. For example, in order to reduce expenses in the challenging economic environment that began during the second half of fiscal 2009, in late fiscal 2009 and early in fiscal 2010, we implemented certain cost reduction measures to reduce operating expenses. Because many of our expenses are fixed in the short-term or are incurred in advance of anticipated sales, we may not be able to decrease our expenses in a timely manner to offset any decrease in customer demand. If customer demand does not increase as anticipated, our profitability could be adversely affected due to our higher expense levels.

Our past growth has placed, and any future long-term growth is expected to continue to place, a significant strain on our management personnel, systems and resources. To implement our current business and product plans, we will need to continue to expand, train, manage and motivate our workforce. All of these endeavors will require substantial management effort. Although we have implemented an enterprise resource planning system to help us improve our planning and management processes, we anticipate that we will also need to continue to implement and improve a variety of new and upgraded operational and financial systems, as well as additional procedures and other internal management systems. These systems can be time consuming and expensive to implement, increase management responsibilities and divert management attention. If we are unable to effectively manage our expanding operations, we may be unable to scale our business quickly enough to meet competitive challenges or exploit potential market opportunities, or conversely, we may scale our business too quickly and the rate of increase in our costs and expenses may exceed the rate of increase in our revenue, either of which would materially and adversely affect our results of operations.

***We are subject to order and shipment uncertainties, and if we are unable to accurately predict customer demand, we may hold excess or obsolete inventory, which would reduce our gross margin, or, conversely, we may have insufficient inventory, which would result in lost revenue opportunities and potentially in loss of market share and damaged customer relationships.***

We typically sell products pursuant to purchase orders rather than long-term purchase commitments. Customers can generally cancel or defer purchase orders on short notice without incurring a significant penalty. In the recent past, some of our customers have developed excess inventories of their own products and have, as a consequence, deferred purchases of our products. We cannot accurately predict what or how many products our

## **Table of Contents**

customers will need in the future. Anticipating demand is difficult because our customers face unpredictable demand for their own products and are increasingly focused more on cash preservation and tighter inventory management. In addition, as an increasing number of our chips are being incorporated into consumer products, we anticipate greater fluctuations in demand for our products, which makes it more difficult to forecast customer demand. For example, we provide chips used in gaming consoles and due to the seasonal nature of the release of these products, we cannot make any assurances that sales of those products will achieve expected levels in the current or future fiscal years. Consequently, the revenues from royalties expected by us from these products may not be fully realized, and our operating results may be adversely affected. We place orders with our suppliers based on forecasts of customer demand and, in some instances, may establish buffer inventories to accommodate anticipated demand. Our forecasts are based on multiple assumptions, each of which may introduce error into our estimates. For example, our ability to accurately forecast customer demand may be impaired by the delays inherent in our lengthy sales cycle. The sales cycle for many of our products is long and requires us to invest significant resources with each potential customer without any assurance of sales to that customer. Our sales cycle typically begins with an extended evaluation and test period, also known as qualification, during which our products undergo rigorous reliability testing by our customers. Qualification is typically followed by an extended development period by our customers and an additional three to nine month period before a customer commences volume production of equipment incorporating our products. This lengthy sales cycle creates the risk that our customers will decide to cancel or change product plans for products incorporating our integrated circuits prior to completion, which makes it even more difficult to forecast customer demand.

If we overestimate customer demand, we may allocate resources to manufacturing products that we may not be able to sell when we expect to, if at all. As a result, we would hold excess or obsolete inventory, which would reduce our gross margin and adversely affect our financial results. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we would miss revenue opportunities and potentially lose market share and damage our customer relationships. In addition, any future significant cancellations or deferrals of product orders or the return of previously sold products could materially and adversely affect our profit margins, increase product obsolescence and restrict our ability to fund our operations.

***We must keep pace with rapid technological change and evolving industry standards in the semiconductor industry to remain competitive.***

Our future success will depend on our ability to anticipate and adapt to changes in technology and evolving industry standards. We sell products in markets that are characterized by rapid technological change, evolving industry standards, frequent new product introductions, short product life cycles and increasing demand for higher levels of integration and smaller process geometries. Our past sales and profitability have resulted, to a large extent, from our ability to anticipate changes in technology and industry standards and to develop and introduce new and enhanced products incorporating the new standards and technologies. Our ability to adapt to these changes and to anticipate future standards, and the rate of adoption and acceptance of those standards, will be a significant factor in maintaining or improving our competitive position and prospects for growth. If new industry standards emerge which we do not properly anticipate, our products or our customers' products could become unmarketable or obsolete, and we could lose market share. We may also have to incur substantial unanticipated costs to comply with these new standards. In addition, our target markets continue to undergo rapid growth and consolidation. A significant slowdown in any of these markets could materially and adversely affect our business, financial condition and results of operations. Our success will also depend on the ability of our customers to develop new products and enhance existing products for the markets they serve and to introduce and promote those products successfully.

***The average selling prices of products in our markets have historically decreased rapidly and will likely do so in the future, which could harm our revenues and gross margin.***

The products we develop and sell are primarily used for high volume applications. As a result, the prices of those products have historically decreased rapidly. We may not be able to maintain or improve the gross margins



---

## **Table of Contents**

and our gross profits and financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our efficiency through reducing our costs or developing new or enhanced products on a timely basis with higher selling prices or gross margin.

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 margin. In the past, we have reduced the average selling prices of our products 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 may experience difficulties in transitioning to smaller geometry process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.***

In order to remain competitive, we expect to continue to transition our semiconductor products to increasingly smaller line width geometries. This transition requires us to modify the manufacturing processes for our products and to redesign some products. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to reduce our costs. In the past, we have experienced some difficulties in shifting to smaller geometry process technologies or new manufacturing processes, which resulted in reduced manufacturing yields, delays in product deliveries and increased expenses. We may face similar difficulties, delays and expenses as we continue to transition our products to smaller geometry processes. We are dependent on our relationships with our foundry subcontractors to transition to smaller geometry processes successfully. We cannot assure you that the foundries that we use will be able to effectively manage the transition or that we will be able to maintain our existing foundry relationships or develop new ones. If we or any of our foundry subcontractors experience significant delays in this transition or fail to efficiently implement this transition, we could experience reduced manufacturing yields, delays in product deliveries and increased expenses, all of which could harm our relationships with our customers and our results of operations. As smaller geometry processes become more prevalent, we expect to continue to integrate greater levels of functionality, as well as customer and third party intellectual property, into our products, however, we may not be able to achieve higher levels of design integration or deliver new integrated products on a timely basis, if at all. Moreover, even if we are able to achieve higher levels of design integration, such integration may have a short-term adverse impact on our results of operations, as we may reduce our revenue by integrating the functionality of multiple chips into a single chip.

***As a result of our global operations, we face foreign business, political, economic and exchange rate risks, which may harm our results of operations, because a majority of our products and our customers' products are manufactured and sold outside of the United States.***

A substantial portion of our business is conducted outside of the United States and, as a result, we are subject to foreign business, political and economic risks. All of our products are manufactured outside of the United States. Our current qualified integrated circuit foundries are located in the same region within Taiwan, and our primary assembly and test subcontractors are located in the Pacific Rim region. In addition, many of our customers are located outside of the United States, primarily in Asia, which further exposes us to foreign risks. Sales to customers located in Asia represented approximately 81% of our net revenue in fiscal 2011, 89% of our net revenue in fiscal 2010 and 86% of our net revenue in fiscal 2009.

As of January 29, 2011, we have substantial operations outside of the U.S. These operations are directly influenced by the political and economic conditions, as well as possible military hostilities that could affect our operations in Israel. We anticipate that our manufacturing, assembly, testing and sales outside of the United States will continue to account for a substantial portion of our operations and revenue in future periods. Accordingly, we are subject to risks associated with international operations, including:

political, social and economic instability, including wars, terrorism, other hostilities and political unrest, boycotts, curtailment of trade and other business restrictions;

**Table of Contents**

compliance with domestic and foreign export and import regulations, and difficulties in obtaining and complying with domestic and foreign export, import and other governmental approvals, permits and licenses;

compliance with foreign laws, and laws and practices that favor local companies;

difficulties in staffing and managing foreign operations;

trade restrictions or higher tariffs;

transportation delays;

difficulties of managing distributors;

less effective protection of intellectual property than is afforded to us in the United States or other developed countries;

inadequate local infrastructure; and

exposure to local banking, currency control and other financial-related risks.

In addition, the recent earthquakes and tsunami in the Pacific Rim has had a significant impact in Japan, and has also led to a crisis with respect to nuclear power plants in the affected regions. Reliable information about the extent of this crisis on our suppliers and customers with substantial operations in Japan has been limited to date. However, based on a review of the global supply chain for our products and discussion with our foundry partners, and based on our knowledge as of the date of this filing, we do not expect a significant impact on our long-term ability to manufacture goods. Additionally, only a small proportion of our sales are to customers located in Japan (3% in fiscal 2011). Nevertheless, the combined effects of these natural disasters have created significant uncertainty, and it is possible that the following impacts could result;

reduced end user demand due to the economic impact to Japan and potentially the global economy;

a slowdown of business or inability to manufacture products by our customers who are located in Japan;

a disruption to the global supply chain for products manufactured in Japan that are included in the end user products either by us or by our customers;

an increase in the cost of products that we purchase due to reduced supply; and

other unforeseen impacts as a result of the uncertainty in Japan.

Moreover, the international nature of our business subjects us to risk associated with the fluctuation of the U.S. dollar versus foreign currencies. Decreases in the value of the U.S. dollar versus currencies in jurisdictions where we have large fixed costs or our third party manufacturers have

significant cost will increase the cost of such operations, which could harm our results of operations. For example, we have large fixed costs in Israel, which will become greater if the U.S. dollar declines in value versus the Israeli Shekel. On the other hand, substantially all of our sales have been denominated in U.S. dollars.

***We rely on third party distributors and manufacturers' representatives and the failure of these distributors and manufacturers' representatives to perform as expected could reduce our future sales.***

From time to time, we enter into relationships with distributors and manufacturers' representatives to sell our products, and we are unable to predict the extent to which these partners will be successful in marketing and selling our products. Moreover, many of our distributors and manufacturers' representatives also market and sell competing products, and may terminate their relationships with us at any time. Our future performance will also depend, in part, on our ability to attract additional distributors or manufacturers' representatives that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. If we cannot retain or attract quality distributors or manufacturers' representatives, our sales and results of operations will be harmed.

---

**Table of Contents**

***We have made and may continue to make acquisitions and investments, which could divert management's attention, cause ownership dilution to our shareholders, be difficult to integrate and adversely affect our results of operations and share price.***

We expect to continue to make acquisitions of, and investments in, businesses that offer complementary products and technologies, augment our market segment coverage, or enhance our technological capabilities. We may also enter into strategic alliances or joint ventures to achieve these goals. We cannot assure you that we will be able to identify suitable acquisition, investment, alliance or joint venture opportunities in the future, or that we will be able to consummate any such transactions or relationships on terms and conditions acceptable to us, or that such transactions or relationships will be successful.

Integrating newly acquired businesses or technologies typically entails many risks that could put a strain on our resources, could be costly and time consuming, and might not be successful. In addition, any acquisitions could materially harm our results of operations or liquidity as a result of either the issuance of dilutive equity securities, new debt or contingent liabilities, or payment of cash. Moreover, such acquisitions could divert our management's attention from other business concerns and also result in customer dissatisfaction. In addition, we might lose key employees of the newly acquired organizations during the acquisition process. The acquisition of another company or its products and technologies may also require us to enter into a geographic or business market in which we have little or no prior experience.

***We are exposed to potential impairment charges on certain assets.***

We have approximately \$2.0 billion of goodwill and \$124.6 million of intangible assets on our balance sheet as of January 29, 2011. Under generally accepted accounting principles (GAAP), we are required to review our intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. We perform an assessment of goodwill at the beginning of our fiscal fourth quarter and we also assess the impairment of goodwill on an interim basis whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. If the businesses acquired fail to meet our expectations set out at the time of the acquisition or if our market capitalization adjusted for control premiums and other factors declines to below our carrying value, we could incur significant goodwill or intangible impairment charges, which could negatively impact our financial results. For example, as a result of our analysis related to acquired intangible assets, we recorded an impairment charge of \$15.6 million in the fourth quarter ended January 31, 2009. In addition, from time to time, we have made investments in other private companies. If the companies that we invest in are unable to execute their plans and succeed in their respective markets, we may not benefit from such investments, and we could potentially lose the amounts we invest. We evaluate our investment portfolio on a regular basis to determine if impairments have occurred. Impairment charges could have a material impact on our results of operations in any period.

***Changes in financial accounting standards or practices or existing taxation rules or practices may adversely affect our financial results.***

Changes in financial accounting standards or practices or changes in existing taxation rules or practices may have a significant effect on our reported results. New accounting pronouncements and taxation rules and varying interpretations of accounting pronouncements and taxation practice have occurred and may occur in the future. For example, the U.S. Congress may consider legislation affecting the taxation of foreign corporations and such legislation if enacted might adversely affect our future tax liabilities and have a material impact on our results of operations. Changes to existing rules or the questioning of current practices by regulators may adversely affect our reported financial results or the way we conduct our business or cause our stock price to decline.

---

**Table of Contents**

***Tax benefits that we receive may be terminated or reduced in the future, which would harm our results of operations and profitability.***

In prior years, we have entered into agreements with the local governments in certain foreign jurisdictions where we have significant operations to provide us with favorable tax rates in those jurisdictions if certain criteria are met.

We obtained from the Minister of Finance of Bermuda under the Exempt Undertakings Tax Protection Act 1966, as amended, an undertaking that, in the event that Bermuda enacts legislation imposing tax computed on income and capital gains, those taxes should not apply to us until March 28, 2016.

The Economic Development Board of Singapore (the EDB) granted Pioneer Status to our wholly-owned subsidiary in Singapore in July 1999. This tax exemption was to expire after ten years, but the EDB in June 2006 agreed to extend the term to 15 years. As a result, we anticipate that a significant portion of the income we earn in Singapore during this period will be exempt from the Singapore income tax. We are required to meet several requirements as to investment, headcount and activities in Singapore to retain this status.

Under the Israeli Encouragement law of approved or benefited enterprise, two branches of Marvell Israel ( MISL ), the GTL branch and the cellular branch (formerly Marvell DSPC), are entitled to a beneficial tax program that includes reduced tax rates and exemption of certain income. The first program was approved for MISL in 1995 and the most recent was approved in 2003. Marvell DSPC has five approved programs, with the first approved in 1990 and the most recent approved in 2010. The benefit period is generally 10 to 15 years and begins in the first year in which our Israeli divisions earn taxable income from the approved or benefited enterprises, provided the maximum period has not elapsed. Income from the approved or benefited enterprises is subject to reduced tax rates ranging between 0% and 10% or tax exemptions for fiscal years 2008 through 2020.

During fiscal 2007, our Switzerland subsidiary received a ten-year Federal and Cantonal tax holiday on revenues from research and design and wafer supply trading activities that will expire in 2017. In fiscal 2011, we met the requirements of the initial five year period; provided we continue to meet several requirements.

If any of our tax agreements in any of these foreign jurisdictions were terminated, our results of our operations and profitability would be harmed.

***We may be unable to protect our intellectual property, which would negatively affect our ability to compete.***

We believe one of our key competitive advantages results from our collection of proprietary technologies that we have developed since our inception. If we fail to protect these intellectual property rights, competitors could sell products based on technology that we have developed that could harm our competitive position and decrease our revenues. We believe that the protection of our intellectual property rights is and will continue to be important to the success of our business. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods, to protect our proprietary technologies. We also enter into confidentiality or license agreements with our employees, consultants and business partners, and control access to and distribution of our documentation and other proprietary information. We have been issued several U.S. and foreign patents and have a number of pending U.S. and foreign patent applications. However, a patent may not be issued as a result of any applications or, if issued, claims allowed may not be sufficiently broad to protect our technology. In addition, it is possible that existing or future patents may be challenged, invalidated or circumvented. Despite our efforts, unauthorized parties may attempt to copy or otherwise obtain and use our products or proprietary technology. Monitoring unauthorized use of our technology is difficult, and the steps that we have taken may not prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. If our patents do not adequately protect our technology, our competitors may be able to offer products similar to ours, which would adversely impact our business and results of operations.

## **Table of Contents**

Certain of our software (as well as that of our customers) may be derived from so-called "open source" software that is generally made available to the public by its authors and/or other third parties. Such open source software is often made available under licenses, such as the GNU General Public License which impose certain obligations on us in the event we were to distribute derivative works of the open source software. These obligations may require us to make source code for the derivative works available to the public, and/or license such derivative works under a particular type of license, rather than the forms of license customarily used to protect our intellectual property. In addition, there is little or no legal precedent for interpreting the terms of certain of these open source licenses, including the determination of which works are subject to the terms of such licenses. While we believe we have complied with our obligations under the various applicable licenses for open source software, in the event that the copyright holder of any open source software were to successfully establish in court that we had not complied with the terms of a license for a particular work, we could be required to release the source code of that work to the public and/or stop distribution of that work.

***We may become involved with costly and lengthy litigation involving our patents and other intellectual property, which could subject us to liability, require us to indemnify our customers, require us to obtain or renew licenses, stop selling our products or force us to redesign our products.***

Litigation involving patents and other intellectual property is widespread in the high-technology industry and is particularly prevalent in the semiconductor industry, where a number of companies and other entities aggressively bring numerous infringement claims to assert their patent portfolios. From time to time our subsidiaries and customers receive, and may continue to receive in the future, notices that allege claims of infringement, misappropriation or misuse of the intellectual property rights of third parties. For example, in recent years, multiple claims have been made against our subsidiaries and our customers related to standards-based technologies such as wireless LAN. In addition, we have had certain patent licenses with third parties that have not been renewed, and if we cannot successfully renew these licenses, our subsidiaries and customers could face claims of infringement. These claims could result in litigation and/or claims for indemnification, which, in turn, could subject us to significant liability for damages, attorneys fees and costs. Any potential intellectual property litigation also could force us to do one or more of the following:

stop selling, offering for sale, making, having made or exporting products or using technology that contains the allegedly infringing intellectual property;

limit or restrict the type of work that employees involved in such litigation may perform for us;

pay substantial damages and/or license fees and/or royalties to the party claiming infringement that could adversely impact our liquidity or operating results;

attempt to obtain or renew licenses to the relevant intellectual property, which licenses may not be available on reasonable terms or at all; and

attempt to redesign those products that contain the allegedly infringing intellectual property.

In addition, many of our contracts with our customers require us to indemnify our customers' products against claims alleging infringement of the proprietary rights of other parties. From time to time, we have agreed to indemnify select customers for claims made against our products, where such claims allege infringement of third party intellectual property rights, including, but not limited to, patents, registered trademarks and/or copyrights.

***We have been named as a party to several lawsuits and we may be named in additional litigation in the future, all of which could result in an unfavorable outcome and have a material adverse effect on our business, financial condition, results of operations, cash flows, and the trading price for our securities.***

We have been named as a party to several lawsuits and we may be named in additional litigation in the future. Please see "Note 12 - Commitments and Contingencies" of our notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K for a more detailed description of a number of the litigation matters we are currently engaged in. Under certain circumstances, we have contractual



## **Table of Contents**

and other legal obligations to indemnify and to incur legal expenses on behalf of current and former directors and officers for these lawsuits. In addition, due to the high volatility of our stock price, we may be vulnerable to securities class action litigation. The ultimate outcome of these actions could have a material adverse effect on our business and the trading price for our securities. Litigation may be time-consuming, expensive, and disruptive to normal business operations, and the outcome of litigation is difficult to predict. The defense of these lawsuits may result in significant expenditures and the continued diversion of our management's time and attention from the operation of our business, which could impede our business. In the event we were to receive an unfavorable outcome in any lawsuit, our business, financial condition, results of operations, cash flows and the trading price of our securities may be materially and adversely affected.

***As a result of the settlement with the SEC, we cannot invoke the safe harbor for the forward-looking statements provision of the Private Securities Litigation Reform Act of 1995 for three years following the entry of judgment.***

On May 8, 2008, we announced that we had reached an agreement with the SEC that concluded the SEC's formal investigation of us with respect to our historic stock option granting practices. As a result of our SEC settlement, we have forfeited for three years following the entry of judgment, or until June 20, 2011, the ability to invoke the safe harbor for the forward-looking statements provision of the Private Securities Litigation Reform Act of 1995. This safe harbor provided us enhanced protection from liability related to forward-looking statements if the forward-looking statements were either accompanied by meaningful cautionary statements or were made without actual knowledge that they were false or misleading. Without the statutory safe harbor, it may be more difficult for us to defend against any claims based on forward-looking statements.

***We depend on key personnel to manage our business, and if we are unable to retain our current personnel and hire additional personnel, our ability to develop and successfully market our products could be harmed.***

We believe our future success will depend in large part upon our ability to attract and retain highly skilled managerial, engineering, sales and marketing personnel. The loss of key employees or the inability to attract qualified personnel, including hardware and software engineers and sales and marketing personnel could delay the development and introduction of and harm our ability to sell our products. We typically do not enter into employment agreements with any of our key technical personnel, and their knowledge of our business and industry would be extremely difficult to replace.

The competition for qualified technical personnel with significant experience in the design, development, manufacturing, marketing and sales of integrated circuits is intense. It is important that we are able to identify, hire and retain engineers who are familiar with the intricacies of the design and manufacture of products based on analog technology. Our key technical personnel represent a significant asset and serve as the source of our technological and product innovations. We may not be successful in attracting and retaining sufficient numbers of technical personnel to develop new products or enhance existing products in a timely manner.

***We have had material weaknesses in internal control over financial reporting in prior fiscal years. Although we believe we have taken the necessary actions to strengthen the weaknesses in our control structure, we cannot assure you that additional material weaknesses will not be identified in the future. If our internal control over financial reporting or disclosure controls and procedures are not effective, there may be errors in our financial statements that could require a restatement or our filings may not be filed on a timely basis and investors may lose confidence in our reported financial information, which could lead to a decline in our stock price.***

We believe that effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. Any inability to provide reliable financial reports or prevent fraud could harm our business. The Sarbanes-Oxley Act of 2002 requires management and our auditors to evaluate and assess the effectiveness of our internal control over financial reporting, as of the end of each year, and to include a management report assessing the effectiveness of our internal control over financial reporting in each Annual Report on Form 10-K.



## **Table of Contents**

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our internal control over financial reporting will prevent all error and all fraud. These inherent limitations include the realities that judgments in decision making can be faulty, breakdowns can occur because of simple errors or mistake and errors discovered by personnel within control systems may not be properly disclosed and addressed. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. In addition, we are consistently evaluating the design and operating effectiveness of our internal controls, a process which sometimes leads to modifications in such controls. These modifications could affect the overall effectiveness or evaluation of the control system in the future by us or our independent registered public accounting firm. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and we cannot assure you that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

***Two of our officers and directors own a large percentage of our voting stock, and, together with another employee who is also a significant shareholder, are related by blood or marriage. These factors may allow the officers and directors as a group or the three related employees to influence the election of directors and the approval or disapproval of significant corporate actions.***

Dr. Sehat Sutardja, our President and Chief Executive Officer, and Weili Dai, who serves as the Vice President of Sales for Communications and Consumer Business of MSI and Vice President and General Manager of Communications and Computing Business Unit of MSI, are husband and wife, and Dr. Sehat Sutardja and Dr. Pantas Sutardja, our Vice President, Chief Technology Officer and Chief Research and Development Officer, are brothers. Together, these three individuals held approximately 16% of our outstanding common shares as of January 29, 2011. As a result, if these individuals act together, they may influence the election of our directors and the approval or disapproval of any significant corporate actions that require shareholder approval. This influence over our affairs might be adverse to the interests of other shareholders. For instance, the voting power of these individuals could have the effect of delaying or preventing an acquisition of us on terms that other shareholders may desire.

Under Bermuda law, all of our officers, in exercising their powers and discharging their duties, must act honestly and in good faith with a view to our best interests and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Majority shareholders do not owe fiduciary duties to minority shareholders. As a result, the minority shareholders will not have a direct claim against the majority shareholders in the event the majority shareholders take actions that damage the interests of minority shareholders. Class actions and derivative actions are generally not available to shareholders under the laws of Bermuda, except that Bermuda courts would be expected to follow English case law precedent, which would permit a shareholder to bring an action in our name if the directors or officers are alleged to be acting beyond our corporate power, committing illegal acts or violating our Memorandum of Association or Third Amended and Restated Bye-Laws ( "Bye-Laws" ). Furthermore, consideration would be given by a Bermuda court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requiring the approval of a greater percentage of the company's shareholders than those who actually approved it.

The Companies Act 1981 of Bermuda, as amended, provides that when one or more shareholders believes the affairs of a company are being conducted in a manner which is prejudicial to the interest of some of the shareholders, a Bermuda court, upon petition, may make such order as it sees fit, including an order regulating

## **Table of Contents**

the conduct of the company's affairs in the future or ordering the purchase of the shares of any shareholders by other shareholders or by the company, and in the case of a purchase of the shares by the company, for the reduction accordingly of the company's capital or otherwise.

***We rely upon certain critical information systems for the operation of our business, and the failure of any critical information system, may result in serious harm to our business.***

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, network communications and e-mail. These information systems are subject to attacks, failures and access denials from a number of potential sources including viruses, destructive or inadequate code, power failures, and physical damage to computers, communication lines and networking equipment. To the extent that these information systems are under our control, we have implemented security procedures, such as virus protection software and emergency recovery processes, to address the outlined risks. While we believe that our information systems are appropriately controlled and that we have processes in place to adequately manage these risks, security procedures for information systems cannot be guaranteed to be failsafe and our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business.

***We are subject to the risks of owning real property.***

Our U.S. headquarters located in Santa Clara, California, and our buildings in Singapore, Etoy, Switzerland and Shanghai, China subject us to the risks of owning real property, which include:

the possibility of environmental contamination and the costs associated with fixing any environmental problems;

adverse changes in the value of these properties, due to interest rate changes, changes in the neighborhood in which the property is located, or other factors;

the possible need for structural improvements in order to comply with zoning, seismic and other legal or regulatory requirements;

the potential disruption of our business and operations arising from or connected with a relocation due to moving to or renovating the facility;

increased cash commitments for improvements to the buildings or the property or both;

increased operating expenses for the buildings or the property or both;

possible disputes with tenants or other third parties related to the buildings or the property or both; and

the risk of financial loss in excess of amounts covered by insurance, or uninsured risks, such as the loss caused by damage to the buildings as a result of earthquakes, floods and or other natural disasters.

***As we carry only limited insurance coverage, any incurred liability resulting from uncovered claims could adversely affect our financial condition and results of operations.***

Our insurance policies may not be adequate to fully offset losses from covered incidents, and we do not have coverage for certain losses. For example, there is very limited coverage available with respect to the services provided by our third party foundries and assembly and test subcontractors. In the event of a natural disaster (such as an earthquake or Tsunami), political or military turmoil, widespread health issues or

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

other significant disruptions to their operations, insurance may not adequately protect us from this exposure. We believe our existing insurance coverage is consistent with common practice and economic and availability considerations. However, if our insurance coverage is inadequate to protect us against unforeseen catastrophic losses, any uncovered losses could adversely affect our financial condition and results of operations.

## **Table of Contents**

*We are incorporated in Bermuda, and, as a result, it may not be possible for our shareholders to enforce civil liability provisions of the securities laws of the United States. In addition, our Bye-laws contain a waiver of claims or rights of action by our shareholders against our officers and directors, which will severely limit our shareholders' right to assert a claim against our officers and directors under Bermuda law.*

We are organized under the laws of Bermuda. As a result, it may not be possible for our shareholders to effect service of process within the United States upon us, or to enforce against us in United States courts judgments based on the civil liability provisions of the securities laws of the United States. There is significant doubt as to whether the courts of Bermuda would recognize or enforce judgments of United States courts obtained against us or our directors or officers based on the civil liability provisions of the securities laws of the United States or any state or hear actions brought in Bermuda against us or those persons based on those laws. The United States and Bermuda do not currently have a treaty providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not based solely on United States federal or state securities laws, would not be automatically enforceable in Bermuda.

Our Bye-laws contain a broad waiver by our shareholders of any claim or right of action, both individually and on our behalf, against any of our officers and directors. The waiver applies to any action taken by an officer or director, or the failure of an officer or director to take any action, in the performance of his or her duties with or for us, other than with respect to any matter involving any fraud or dishonesty on the part of the officer or director. This waiver will limit the rights of our shareholders to assert claims against our officers and directors unless the act complained of involves actual fraud or dishonesty. Thus, so long as acts of business judgment do not involve actual fraud or dishonesty, they will not be subject to shareholder claims under Bermuda law. For example, shareholders will not have claims against officers and directors for a breach of trust, unless the breach rises to the level of actual fraud or dishonesty.

*Our Bye-laws contain provisions that could delay or prevent a change in corporate control, even if the change in corporate control would benefit our shareholders.*

Our Bye-laws contain change in corporate control provisions, which include:

authorizing the issuance of preferred stock without shareholder approval; and

providing for a classified board of directors; and

requiring a vote of two-thirds of the outstanding shares to approve any change of corporate control in the event the action is not approved by at least  $66\frac{2}{3}\%$  of the directors holding office at the date of the Board meeting to approve the action.

These change in corporate control provisions could make it more difficult for a third party to acquire us, even if doing so would be a benefit to our shareholders. However, beginning in calendar year 2011 our classified board of directors will be phased out and by calendar year 2013 all director will be up for election annually.

### **Item 1B. *Unresolved Staff Comments***

None.

### **Item 2. *Properties***

Our U.S. headquarters, housing research and design functions as well as elements of sales, marketing, administration and operations, is located in Santa Clara, California. We own the Santa Clara facility, which consists of approximately 993,000 square feet on 33.8 acres of land. We also own buildings in China, Singapore and Switzerland which are used for operations, research and design, sales, marketing and administrative functions.

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

In addition to these properties, we lease approximately 361,000 square feet in Israel for research and design, administration and operations, which lease term expires in August 2025. We also lease smaller facilities in

## **Table of Contents**

Bermuda, Canada, China, Finland, Germany, India, Italy, Japan, Korea, Netherlands, Spain, Taiwan, the United Kingdom and the United States, which are occupied by administrative, sales, design and field application personnel. We also lease a building in California, totaling approximately 41,000 square feet, which is currently subleased to tenants as of January 29, 2011.

Based upon our estimates of future hiring, we believe that our current facilities in most locations will be adequate to meet our requirements at least through the next fiscal year. In certain locations where we have plans to hire a significant amount of employees, such as China, we may need to obtain additional facilities.

### **Item 3.      *Legal Proceedings***

The information set forth under Note 12 Commitments and Contingencies of our notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K is incorporated herein by reference. For additional discussion of certain risks associated with legal proceedings, please see Part I, Item 1A, Risk Factors above.

### **Item 4.      *(Removed and Reserved)***

**Table of Contents****PART II****Item 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***  
**Market Information**

Our common shares are traded on the NASDAQ Global Select Market under the symbol MRVL. Our common shares began trading on June 27, 2000, upon completion of our initial public offering. The following table shows for the periods indicated the high and low sales prices for our common shares on the NASDAQ Global Select Market and reflects all stock splits to date.

	<b>Fiscal Year 2011</b>		<b>Fiscal Year 2010</b>	
	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 22.58	\$ 17.98	\$ 11.4	\$ 6.56
Second Quarter	\$ 20.79	\$ 14.87	\$ 14.2	\$ 9.98
Third Quarter	\$ 19.28	\$ 14.51	\$ 16.7	\$ 13.1
Fourth Quarter	\$ 21.89	\$ 18.12	\$ 21.8	\$ 13.4

As of March 18, 2011, the approximate number of record holders of our common shares was 207 (not including beneficial owners of stock held in street name).

**Table of Contents****Stock Price Performance Graph**

*This performance graph shall not be deemed filed for purposes of Section 18 of the Exchange Act or incorporated by reference into any filings under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.*

The graph below compares the cumulative total shareholder return of our common shares with the cumulative total return of the S&P 500 Index and the Philadelphia Semiconductor Index since January 28, 2006 through January 29, 2011. The graph assumes that \$100 was invested on January 28, 2006 in our common shares and on January 28, 2006 in each index and that any dividends were reinvested. No cash dividends have been declared on our common shares since our initial public offering in 2000. Shareholder returns over the indicated periods should not be considered indicative of future stock prices or shareholder returns.

	1/28/06	1/27/07	2/2/08	1/31/09	1/30/10	1/29/11
<b>Marvell Technology Group Ltd.</b>	<b>100.00</b>	<b>53.85</b>	<b>36.13</b>	<b>20.64</b>	<b>49.35</b>	<b>54.25</b>
<b>S&amp;P 500</b>	<b>100.00</b>	<b>114.51</b>	<b>111.87</b>	<b>68.66</b>	<b>91.41</b>	<b>111.69</b>
<b>PHLX Semiconductor</b>	<b>100.00</b>	<b>93.92</b>	<b>87.18</b>	<b>51.90</b>	<b>81.53</b>	<b>107.58</b>

**Dividends**

We have never declared or paid a cash dividend on our common shares. Any future determination with respect to the declaration and payment of dividends will be at the discretion of our Board of Directors.



**Table of Contents****Equity Compensation Plan Information**

Information regarding the securities authorized for issuance under our equity compensation plans can be found under Part III, Item 12 of this Annual Report on Form 10-K under the caption Equity Compensation Plan Information.

**Recent Sales of Unregistered Securities**

None.

**Issuer Purchases of Equity Securities**

The following table presents details of our repurchases during the three months ended January 29, 2011 (in thousands, except per share data):

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximated Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (1)
October 31 – November 27, 2010		\$		\$ 439,352
November 28 – December 25, 2010		\$		\$ 439,352
December 26, 2010 – January 29, 2011	1,346	\$ 19.94	1,346	\$ 412,514
Total	1,346	\$ 19.94	1,346	\$ 412,514

On August 19, 2010, we announced that our Board of Directors authorized a program to repurchase up to \$500 million of our outstanding common shares. On March 3, 2011, we announced that our Board of Directors has authorized an increase of \$500 million to the existing repurchase authorization, which increases the total authorized to \$1 billion. We intend to affect the repurchase program in accordance with the conditions of Rule 10b-18 under the Exchange Act. The repurchase program will be subject to market conditions and other factors and does not obligate us to repurchase any dollar amount or number of our common shares. The program may be extended, modified, suspended or discontinued at any time. We may utilize privately negotiated transactions in order to effect our repurchases.

Through January 29, 2011, we had repurchased a total of 4.9 million shares for \$87.5 million. Subsequent to our fiscal year end and through March 24, 2011, we repurchased additional shares for \$497 million, bringing our total repurchases under our repurchase program to \$584 million.

**Table of Contents****Item 6. Selected Financial Data**

The following selected consolidated financial data should be read together with Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations and Part II, Item 8, Financial Statements and Supplementary Data contained elsewhere in this Annual Report on Form 10-K.

	January 29, 2011 (1)	January 30, 2010 (2)	January 31, 2009 (3)	February 2, 2008 (4)	January 27, 2007 (5)
(In thousands, except per share amounts)					
<b>Consolidated Statement of Operations Data:</b>					
Net revenue	\$ 3,611,893	\$ 2,807,687	\$ 2,950,563	\$ 2,894,693	\$ 2,237,553
Cost of goods sold	\$ 1,473,274	\$ 1,227,096	\$ 1,426,624	\$ 1,497,796	\$ 1,100,241
Research and development	\$ 897,578	\$ 828,176	\$ 935,272	\$ 994,202	\$ 658,211
Operating income (loss)	\$ 901,192	\$ 334,115	\$ 165,176	\$ (105,590)	\$ 1,057
Net income (loss)	\$ 904,129	\$ 353,456	\$ 147,242	\$ (114,427)	\$ (12,095)
Basic net income (loss) per share	\$ 1.39	\$ 0.57	\$ 0.24	\$ (0.19)	\$ (0.02)
Diluted net income (loss) per share	\$ 1.34	\$ 0.54	\$ 0.23	\$ (0.19)	\$ (0.02)
Weighted average shares basic	648,347	623,934	608,747	590,308	586,152
Weighted average shares diluted	676,878	653,741	630,328	590,308	586,152
<b>Consolidated Balance Sheet Data:</b>					
Cash, cash equivalents, restricted cash and short-term investments	\$ 2,930,030	\$ 1,796,717	\$ 951,909	\$ 630,902	\$ 596,380
Working capital	\$ 3,071,961	\$ 1,913,658	\$ 1,150,667	\$ 920,529	\$ 636,849
Total assets	\$ 6,338,157	\$ 5,170,940	\$ 4,414,200	\$ 4,550,594	\$ 4,527,700
Term loan and capital lease obligations, net of current portion	\$ 511	\$ 511	\$ 2,451	\$ 394,988	\$ 411,846
Total shareholders' equity	\$ 5,521,869	\$ 4,417,979	\$ 3,829,067	\$ 3,411,519	\$ 3,227,184
Number of employees	5,893	5,241	5,552	5,331	5,249

- (1) Fiscal 2011 includes \$8.5 million for the portion of IP litigation settlements related to previous fiscal years.
- (2) Fiscal 2010 includes a \$72.0 million charge in connection with the settlement of a class action litigation. This is offset by a \$27.3 million benefit in fiscal 2010 resulting from the expiration of the statute of limitations related to a tax contingency reserve, in addition to a \$5.3 million income tax benefit related to the adjustment of a prior year deferred tax asset.
- (3) In fiscal 2009, we wrote-off \$15.6 million of intangible assets that were determined to be impaired due to declining revenue from products acquired and to a delay in the deployment of technology within a certain industry.
- (4) In fiscal 2008, we wrote-off \$7.2 million of intangible assets that were determined to be impaired due to declining revenue from products acquired. In the fourth quarter of fiscal 2008, we recorded a restructuring charge of \$7.9 million related to a worldwide reduction in force implemented primarily to reduce operating expenses. In the fourth quarter of fiscal 2008, we recorded a one-time benefit of \$22.1 million in other income related to the true-up of credits under the supply agreement with Intel to reflect differences in the original estimate and actual product mix and yields.
- (5) Effective from the beginning of fiscal 2007, we are required to measure and recognize compensation expense for all share-based awards to employees and directors based on estimated fair values. We adopted share-based payment rules under the modified prospective method, reflecting in our fiscal 2007 results the compensation expense associated with unvested options granted prior to fiscal 2007, as well as options granted during that year. In fiscal 2007, we recorded an adjustment of \$8.8 million for the cumulative effect of a change in accounting principle related to estimating forfeitures in our adoption of share-based payments authoritative literature. In the fourth quarter of fiscal 2007, we recorded an acquired IPR&D charge of \$77.8 million in connection with our acquisition of the communication and application processor business from Intel (the ICAP Business).

## **Table of Contents**

### **Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations***

The following discussion of our financial condition and results of operations should be read in conjunction with the financial statements and related notes included in this Annual Report on Form 10-K. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties including those discussed under Part I, Item 1A, Risk Factors. These risks and uncertainties may cause actual results to differ materially from those discussed in the forward-looking statements.

#### **Overview**

We are a leading global semiconductor provider of high-performance application-specific standard products. Our core strength of expertise is the development of complex SoC devices leveraging our extensive technology portfolio of intellectual property in the areas of analog, mixed-signal, digital signal processing and embedded ARM-based microprocessor integrated circuits. We also develop platforms that we define as integrated hardware and software that incorporate digital computing technologies designed and configured to provide an optimized computing solution compared to individual components. Our broad product portfolio includes devices for data storage, enterprise-class Ethernet data switching, Ethernet PHY handheld cellular, Ethernet-based wireless networking, personal area networking, Ethernet-based PC connectivity, control plane communications controllers, video-image processing and power management solutions. Our products serve diverse applications used in carrier, metropolitan, enterprise and PC-client data communications and storage systems. Additionally, we serve the consumer electronics market for the convergence of voice, video and data applications. We are a fabless integrated circuit company, which means that we rely on independent, third party contractors to perform manufacturing, assembly and test functions. This approach allows us to focus on designing, developing and marketing our products and significantly reduces the amount of capital we need to invest in manufacturing products.

Historically, a relatively small number of customers have accounted for a significant portion of our revenue. Two customers accounted for more than 10% of our revenue. Western Digital represented approximately 21%, 24% and 21% of our net revenue in fiscal 2011, 2010 and 2009, respectively. Research In Motion represented approximately 14% of net revenue in fiscal 2011 and less than 10% of net revenue in fiscal 2010 and 2009. During fiscal 2010, Toshiba acquired the hard disk drive operations of Fujitsu. Although Toshiba and Fujitsu revenue have not historically accounted for more than 10% of our revenue, we have combined fiscal 2010 revenue together for reporting purposes for both Toshiba and Fujitsu based on Toshiba's acquisition of Fujitsu's hard disk drive operations in fiscal 2010. Toshiba represented less than 10% of our net revenue in fiscal 2011 and 2009, respectively and approximately 15% of our net revenue in fiscal 2010. Also, in fiscal 2011, 2010, 2009, no distributor accounted for more than 10% of our net revenue. We expect to continue to experience significant customer concentration in future periods. In addition, most of our sales are made to customers located outside of the United States, primarily in Asia. Sales to customers in Asia represented approximately 81%, 89%, and 86% of our net revenue for fiscal 2011, 2010, 2009, respectively. Because many manufacturers and manufacturing subcontractors of our customers are located in Asia, we expect that most of our revenue will continue to be represented by sales to our customers in that region. All of our sales to date have been denominated in U.S. dollars.

An increasing number of our products are being incorporated into consumer electronics products, including gaming devices, which are subject to significant seasonality and fluctuations in demand. Due to holiday and back to school buying trends, these seasonal demand patterns generally will 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.

A relatively large portion of our sales have historically been made on the basis of purchase orders rather than long-term agreements. In addition, the sales cycle for our products is long, which may cause us to experience a delay between the time we incur expenses and the time revenue is generated from these expenditures. We anticipate that the rate of new orders may vary significantly from quarter to quarter. Consequently, if anticipated sales and shipments in any quarter do not occur when expected, expenses and inventory levels could be disproportionately high, and our operating results for that quarter and future quarters may be adversely affected.

## **Table of Contents**

Our fiscal year is the 52- or 53-week period ending on the Saturday closest to January 31. In a 52-week year, each fiscal quarter consists of 13 weeks. The additional week in a 53-week year is added to the fourth quarter, making such quarter consist of 14 weeks. Fiscal 2011, 2010 and 2009 were comprised of 52-week periods.

### **Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to performance-based compensation, revenue recognition, including provisions for sales returns and allowances, inventory excess and obsolescence, investment fair values, goodwill and other intangible assets, income taxes, litigation and other contingencies. In addition, we use assumptions when employing the Black-Scholes option valuation model to calculate the fair value of stock-based awards granted. We base our estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, when these carrying values are not readily available from other sources. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

*Revenue Recognition.* We recognize revenues when there is persuasive evidence of an arrangement, delivery has occurred, the fee is fixed or determinable, and collection is reasonably assured.

Product revenue is generally recognized upon shipment of product to customers, net of accruals for estimated sales returns and rebates. However, some of our sales are made through distributors under agreements allowing for price protection, shipped from stock pricing adjustment rights, and limited rights of return on product unsold by the distributors. Although title passes to the distributor upon shipment terms and payment by our distributors is not contingent on resale of the product, product revenue on sales made through distributors with price protection, shipped from stock pricing adjustment rights and stock rotation rights are deferred until the distributors sell the product to end customers. Deferred revenue less the related cost of the inventories is reported as deferred income. We do not believe that there is any significant exposure related to impairment of deferred cost of sales, as our historical returns have been minimal and inventory turnover for our distributors generally ranges from 60 to 90 days. Our sales to direct customers are made primarily pursuant to standard purchase orders for delivery of products. Revenue related to the sale of consignment inventory is not recognized until the product is pulled from inventory stock by the customer.

The provision for estimated sales returns and allowances on product sales is recorded in the same period the related revenues are recorded. These estimates are based on historical sales returns, analysis of credit memo data and other known factors. Actual returns could differ from these estimates. We account for rebates by recording reductions to revenue in the same period that the related revenue is recorded. The amount of these reductions is based upon the terms included in our various rebate agreements.

*Stock-Based Compensation.* Stock-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as expense over the requisite service period. We amortize stock-based compensation expense under the straight-line attribution method over the vest term, which is generally four years for annual grants to employees and five years for new hire grants.

The fair value of restricted stock units is based on the fair market value of our common shares on the date of grant. We estimate the fair value of stock option awards on the date of grant using the Black Scholes option-pricing model. The value of the portion of the awards that is ultimately expected to vest is recognized as expense over the requisite service periods. The Black-Scholes model incorporates various highly subjective assumptions including expected term of awards, expected future stock price volatility, and expected forfeiture rates.

## **Table of Contents**

In developing estimates used to calculate assumptions, we establish the expected term for employee options, as well as expected forfeiture rates, based on the historical settlement experience and after giving consideration to vesting schedules. Assumptions for option exercises and pre-vesting terminations of options were stratified by employee groups with sufficiently distinct behavior patterns. Expected volatility was developed based on the average of our historical daily stock price volatility.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from initial estimates. Stock-based compensation expense is recorded net of estimated forfeitures such that expense is recorded only for those stock-based awards that are expected to vest. Previously recognized expense is reversed for the portion of awards forfeited prior to vesting as and when forfeitures occurred.

In addition, for both stock options and restricted stock units, we are required to estimate forfeiture rates and true up these forfeiture rates when actual results are different from our estimates. Assumptions for forfeitures are stratified by employee groups with sufficiently distinct behavior patterns. Changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the effect of adjusting the rate for all expense amortization is recognized in the period the forfeiture estimate is changed. If the actual forfeiture rate is higher than the estimated forfeiture rate, then an adjustment will be made to increase the estimated forfeiture rate, which will result in a decrease to the expense recognized in the financial statements. If the actual forfeiture rate is lower than the estimated forfeiture rate, then an adjustment will be made to lower the estimated forfeiture rate, which will result in an increase to the expense recognized in the financial statements. The expense we recognize in future periods could be affected by changes in the estimated forfeiture rate and may differ significantly from amounts recognized in the current period and/or our forecasts.

Additionally, for certain of our performance-based awards, we must make subjective assumptions regarding the likelihood that the related performance metrics will be met. These assumptions are based on various revenue and operating performance criteria. Changes in our actual performance could cause a significant adjustment in future periods for these performance-based awards.

*Accounting for Income Taxes.* To prepare our consolidated financial statements, we estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual tax exposure together with assessing temporary differences resulting from the differing treatment of certain items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets.

In accordance with Accounting Standards Codification ( ASC ) Topic 740, Income Taxes ( ASC 740 ), we recognize income taxes using an asset and liability approach. This approach requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated.

Evaluating the need for an amount of a valuation allowance for deferred tax assets often requires judgment and analysis of all the positive and negative evidence available to determine whether all or some portion of the deferred tax assets will not be realized. A valuation allowance must be established for deferred tax assets when it is more likely than not that they will not be realized. Based on the available evidence and judgment, we have determined that it is more likely than not that research credits and certain acquired net operating losses will not be realized and therefore we have provided a full valuation allowance against these credits. It is not clear whether any of the research credits will ever be used, therefore, we have recorded a valuation allowance on the entire research credit carryforward. Accordingly, we have established a valuation allowance for such deferred tax assets. If there is a change in our ability to realize our deferred tax assets, then our tax provision may decrease in the period in which we determine that realization is more likely than not.

## **Table of Contents**

As a multinational corporation, we conduct our business in many countries and are subject to taxation in many jurisdictions. The taxation of our business is subject to the application of various and sometimes conflicting tax laws and regulations as well as multinational tax conventions. Our effective tax rate is highly dependent upon the geographic distribution of our worldwide earnings or losses, the tax regulations and tax holidays in each geographic region, the availability of tax credits and carryforwards, and the effectiveness of our tax planning strategies. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation, and the evolution of regulations and court rulings. Consequently, taxing authorities may impose tax assessments or judgments against us that could materially impact our tax liability and/or our effective income tax rate.

We are subject to income tax audits by the respective tax authorities in all of the jurisdictions in which we operate. We recognize the effect of income tax positions only if these positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is more than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. We record interest and penalties related to unrecognized tax benefits in income tax expense. The calculation of our tax liabilities involves the inherent uncertainty associated with the application of U.S. GAAP and complex tax laws. We believe we have adequately provided in our financial statements for additional taxes that we estimate may be required to be paid as a result of such examinations. While we believe that we have adequately provided for all tax positions, amounts asserted by tax authorities could be greater or less than our accrued position. These tax liabilities, including the interest and penalties, are released pursuant to a settlement with tax authorities, completion of audit or expiration of various statutes of limitation. The material jurisdictions in which we may be subject to potential examination by tax authorities throughout the world, include such major jurisdictions as China, Israel, Singapore, Switzerland and the United States.

The recognition and measurement of current taxes payable or refundable and deferred tax assets and liabilities require that we make certain estimates and judgments. Changes to these estimates or a change in judgment may have a material impact on our tax provision in a future period.

*Inventory Valuation.* We value our inventory at the lower of cost or market, cost being determined under the first-in, first-out method. We regularly review inventory quantities on hand and record a provision for excess and obsolete inventory based primarily on our estimated forecast of product demand and production requirements. The valuation of inventory requires us to estimate the future demand for our products. The estimate of future demand is compared to our inventory levels, including open purchase commitments, to determine the amount, if any, of obsolete or excess inventory. Demand for our products can fluctuate significantly from period to period. A significant decrease in demand could result in an increase in the amount of excess inventory on hand. In addition, our industry is characterized by rapid technological change, frequent new product development and rapid product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Additionally, our estimates of future product demand may prove to be inaccurate, in which case we may have understated or overstated the provision required for excess and obsolete inventory. In the future, if our inventory is determined to be overvalued, we would be required to recognize such costs in our cost of goods sold at the time of such determination. Likewise, if our inventory is determined to be undervalued, we may have over-reported our cost of goods sold in previous periods and would be required to recognize additional gross margin at the time the related inventory is sold. Therefore, although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of our inventory and our results of operations.

*Valuation of Long-lived Assets and Intangible Assets.* We assess the impairment of long-lived assets and intangible assets whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Circumstances which could trigger a review include, but are not limited to the following: significant decreases in the market price of the asset; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or

## **Table of Contents**

construction of the asset; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. Whenever events or changes in circumstances suggest that the carrying amount of long-lived assets may not be recoverable, we estimate the future cash flows expected to be generated by the asset from its use or eventual disposition. If the sum of the expected future cash flows, which includes revenue, is less than the carrying amount of those assets, we recognize an impairment loss based on the excess of the carrying amount over the fair value of the assets. Significant management judgment is required in the forecasts of future operating results that are used in the discounted cash flow method of valuation.

As of January 29, 2011, we had a total of \$124.6 million in acquired intangible assets. Of this amount, \$9.7 million of in-process research and development ( IPR&D ) was evaluated based on an annual impairment test at the beginning of the fourth quarter by comparing the current fair value of the IPR&D asset to its carrying value. No impairment was recorded in fiscal 2011 on our IPR&D.

*Valuation of Goodwill.* We perform an annual impairment assessment of goodwill at the beginning of our fiscal fourth quarter, and whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important which could trigger a goodwill impairment review include (i) significant underperformance relative to historical or projected future operating results, (ii) significant changes in the manner of our use of the acquired assets or the strategy for our overall business, (iii) significant negative industry or economic trends, (iv) a significant decline in our stock price for a sustained period and (v) a significant change in our market capitalization relative to our net book value. When performing our assessment, we include a control premium, in addition to our fair value to reflect the full value and amount that a buyer would be willing to pay for the company. Since our inception, we have not recognized any impairment of goodwill.

*Litigation Costs.* From time to time, we are involved in legal actions arising in the ordinary course of business. There can be no assurance these actions or other third party assertions will be resolved without costly litigation, in a manner that does not adversely impact our financial position, results of operations or cash flows or without requiring royalty payments in the future, which may adversely impact gross margins. We are aggressively defending these litigation matters and believe no material adverse outcome will result. However, given uncertainties associated with any litigation, if our assessments prove to be wrong, or if additional information becomes available such that we estimate that there is a probable loss or probable range of loss associated with these contingencies, then we would be required to record liabilities to cover those losses, which could materially impact our results of operations, financial position and cash flows.

## **Results of Operations**

We ended the year with record revenues, a strong balance sheet and excellent cash flows. We believe we are strategically positioned with new products in new markets and with new customers expected to start to ramp in the next year. Net revenue for fiscal 2011 was \$3.61 billion, a 29% increase over the \$2.81 billion reported for fiscal 2010. The increase was due to both growth in new products and customers, and the lower base of revenues in the first half of fiscal 2010 resulting from of the global economic downturn in that year. By end market, the increase in net revenue was primarily due to products in the mobile and wireless end markets, which increased over 110% year over year, and our networking end market, which increased by about 15% annually. Net revenues in our storage end market increased by about 5%. Within the mobile and wireless end market, we experienced double digit sequential growth for the first three quarters, and ended on a sequential decline primarily due to seasonality in the gaming industry. In the networking end market, after a strong first half, we experienced some excess inventory which we believe had worked its way through the system by year end. In storage, after a strong first quarter, the PC industry experienced some inventory reductions, and ended approximately flat. Full-year cost of sales as a percentage of net revenue for fiscal 2011 was about 40.8% compared to 43.7% reported in fiscal 2010, an improvement of about 290 basis points year over year. Operating income increased to \$901 million, or approximately 25% of revenues, significantly higher than 12% in fiscal 2010. Our diluted earnings per share for the year was \$1.34 in fiscal 2011, compared to \$0.54 in fiscal 2010.

**Table of Contents**

In addition, during fiscal 2011, we generated nearly \$1.2 billion in cash from operations, and exited the year with approximately \$2.9 billion in cash, cash equivalents, and short term investments. As such, during fiscal 2011, our Board of Directors authorized a stock repurchase program of up to \$500 million of our common shares and we repurchased 4.9 million shares for \$87.5 million in cash in fiscal 2011. In March 2011, the Board of Directors authorized us to repurchase up to an additional \$500 million, for a total of \$1 billion, of our outstanding common shares.

Despite these excellent results, the beginning of fiscal 2012 looks challenging. Seasonal declines in the gaming market, along with a shift in the product mix at one of our major customers of mobile and wireless products are leading to a lower than seasonal revenue in the first quarter of fiscal 2012. In addition, we are switching to a local hub inventory arrangement with one of our major customers, whereby revenue will not be recognized until the customer pulls the inventory from our warehouse at a location in close proximity to the customer. This transition is further impacting our expected net revenue in the first quarter of fiscal 2012.

The following table sets forth information derived from our consolidated statements of operations expressed as a percentage of net revenue.

	January 29, 2011	Fiscal Years Ended January 30, 2010	January 31, 2009
Net revenue	100%	100%	100%
Operating costs and expenses:			
Cost of goods sold	40.8	43.7	48.4
Research and development	24.9	29.5	31.7
Selling and marketing	4.3	5.0	5.5
General and administrative	2.9	6.1	3.7
Amortization and write-off of acquired intangible assets	2.2	3.8	5.2
Total operating costs and expenses	75.1	88.1	94.4
Operating income	24.9	11.9	5.6
Interest and other income	0.3	0.4	0.8
Interest expense	0.0	(0.1)	(0.6)
Income before income taxes	25.2	12.2	5.8
Provision (benefit) for income taxes	0.2	(0.4)	0.8
Net income	25.0%	12.6%	5.0%

**Years Ended January 29, 2011 and January 30, 2010****Net Revenue**

	January 29, 2011	Fiscal Years Ended January 30, 2010	% Change in 2011
(in thousands, except percentage)			
Net revenue	\$ 3,611,893	\$ 2,807,687	28.6%
Net revenue is gross revenue, net of accruals for estimated sales returns and rebates. Our net revenue in fiscal 2011 increased by \$804 million or 28.6%, from \$2.81 billion in fiscal 2010, to \$3.61 billion in fiscal 2011. Mobile and wireless revenue more than doubled as a result of the significant growth in demand for our cellular communications products, along with increased demand for our embedded wireless LAN products. Our networking revenue grew 15% during fiscal 2011 compared to fiscal 2010, primarily due to a combination of increased demand for both our client and enterprise Ethernet products, along with an improved macroeconomic environment for			





**Table of Contents**

capital intensive networking equipment. Despite a challenging first few quarters, overall storage revenue grew 5% in fiscal 2011 as compared with fiscal 2010, due to improved industry demand for hard drives as well as company specific market share gains. The growth in our overall net revenue of approximately 28.6% reflects a combination of increased demand for our newer products, and an improvement in overall economic conditions.

We currently expect that revenue in fiscal 2012 will increase moderately from the level in fiscal 2011 as we continue to ramp new design wins in our various end markets.

In the first quarter of fiscal 2012, due to seasonal declines in the gaming business, the shift of one of our customers to a lower product mix, and the transition of a major customer to a hub inventory model, we expect revenues to decline to between \$800 million and \$850 million. However, we expect growth in the latter half of the year, and therefore we expect overall net revenue in fiscal 2012 to increase moderately from fiscal 2011.

*Cost of Goods Sold*

	<b>Fiscal Years Ended</b>		
	<b>January 29, 2011</b>	<b>January 30, 2010</b>	<b>% Change in 2011</b>
	<b>(in thousands, except percentage)</b>		
Cost of goods sold	\$ 1,473,274	\$ 1,227,096	20.1%
% of net revenue	40.8%	43.7%	

Cost of goods sold as a percentage of net revenue in fiscal 2011 decreased by 290 basis points, from 43.7% in fiscal 2010 to 40.8% in fiscal 2011. The improvement was primarily driven by the improved cost structure of our newer products as we have continued to benefit from the cost focus during the engineering design phase of our products, continued focus on efficiency and yield improvements. The increases were partially offset by a higher amount of period costs related to production tapeouts for newer products, and rising costs of gold.

Our cost of goods sold as a percentage of revenue may fluctuate in future periods due to, among other things, changes in the mix of products sold, the timing of production ramps of new products, increased pricing pressures from our customers and competitors, particularly in the consumer product markets that we are targeting, charges for obsolete or potentially excess inventory, changes in the costs charged by our foundry, assembly and test subcontractors, and the introduction of new products with lower margins and higher product warranty costs.

We currently expect that cost of goods sold as a percentage of net revenue in fiscal 2012 will be slightly higher than fiscal 2011 as a result of product mix changes, tightening foundry and subcontractor capacity in advanced technologies resulting in higher costs as well as rising commodity prices.

*Research and Development*

	<b>Fiscal Years Ended</b>		
	<b>January 29, 2011</b>	<b>January 30, 2010</b>	<b>% Change in 2011</b>
	<b>(in thousands, except percentage)</b>		
Research and development	\$ 897,578	\$ 828,176	8.4%
% of net revenue	24.9%	29.5%	

Research and development expenses increased by \$69.4 million in fiscal 2011 compared to fiscal 2010, primarily due to a \$71.1 million increase in compensation and benefits expense related to headcount increases and temporary help in fiscal 2011. Tools for research and development activities increased by \$11.5 million. Amortization expense of technology licenses increased by \$9.1 million due to the increases in acquired licenses

**Table of Contents**

compared to fiscal 2010. Expenses for outside professional services and other services increased by \$4.9 million. These increases were partially offset by a decrease of \$13.1 million in restructuring costs, a decrease of \$7.2 million in stock-based compensation expense, and a decrease of \$6.8 million in depreciation expense due to certain assets being fully depreciated. In addition, legal expenses related to patent filings decreased by \$2.6 million due to lower legal activity, while general facility expenses, including software and hardware expenses, decreased by \$2.1 million.

We currently expect that research and development expenses in fiscal 2012 will increase moderately, mainly attributable to new product introduction in advanced technologies as we ramp up to support new customers and programs.

*Selling and Marketing*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
Selling and marketing	\$ 155,481	\$ 139,404	11.5%
% of net revenue	4.3%	5.0%	

Selling and marketing expense increased \$16.1 million in fiscal 2011 compared to fiscal 2010 primarily due to a \$10.6 million increase in trade shows and public relations activities as we increased our involvement in these areas in fiscal 2011. Compensation and benefits expenses increased by \$12.1 million, primarily due to higher headcount. These increases were partially offset by a decrease of \$3.5 million in stock-based compensation expense, a decrease of \$1.8 million in restructuring expense, and a decrease of \$1.6 million in general facility expense.

We currently expect that selling and marketing expenses in fiscal 2012 will increase moderately to support our anticipated revenue growth.

*General and Administrative*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
General and administrative	\$ 104,830	\$ 171,362	(38.8)%
% of net revenue	2.9%	6.1%	

General and administrative expense decreased by \$66.5 million in fiscal 2011 compared to fiscal 2010 primarily due to the one-time \$72.0 million legal settlement recorded during fiscal 2010 in connection with the settlement of the class action securities litigation related to our historical stock option granting practices. Legal fees, on a net basis, decreased by \$8.6 million due to lower overall legal activity as a result of the settlement of various litigation matters. Depreciation expense decreased by \$8.1 million due to certain assets being fully depreciated. Restructuring costs decreased by \$3.6 million due to lower restructuring activity in fiscal 2011. These decreases were partially offset by an increase of \$10.8 million in employee-related benefits expense and temporary help. General facility expenses increased by \$6.6 million, stock-based compensation expense increased by \$5.8 million, outside professional services increased by \$1.5 million, and charitable contributions increased by \$1.2 million.

We currently expect that general and administrative expenses in fiscal 2012 will increase moderately to support the growth of our business.

**Table of Contents***Amortization and Write-Off of Acquired Intangible Assets*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
Amortization and write-off of acquired intangible assets	\$ 79,538	\$ 107,534	(26.0)%
% of net revenue	2.2%	3.8%	

The decrease in amortization and write-off of acquired intangible assets of \$28.0 million in fiscal 2011 compared to fiscal 2010 is primarily due to certain intangible assets being fully amortized. In addition, no write-off was made in fiscal 2011, while a write-off occurred in fiscal 2010. In fiscal 2010, we determined that certain acquisition-related intangibles associated with the acquisition of the ICAP Business were partially impaired. The primary reason for the partial write-off of certain purchased intangibles from the ICAP Business was due to the transition to a newer product by a large customer. The amount of the purchased intangibles written-off in fiscal 2010 due to impairment was \$1.0 million.

*Interest and Other Income*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
Interest and other income	\$ 9,414	\$ 10,727	(12.2)%
% of net revenue	0.3%	0.4%	

Interest and other income consists primarily of interest earned on cash, cash equivalents and short-term investment balances, gains and losses on the sale of marketable and equity securities and foreign currency impacts. The lower interest and other income during fiscal 2011, as compared to fiscal 2010, was primarily due to a \$8.0 million gain on our severance fund assets in a foreign jurisdiction. Gains on equity investments in privately held companies were slightly higher at \$5.9 million in fiscal 2011, compared to gains of \$4.9 million in fiscal 2010. During fiscal 2011, we also had \$5.4 million of higher interest income due to higher cash and investment balances, as well as slightly higher interest rates on invested balances as compared to fiscal 2010.

*Interest Expense*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
Interest expense	\$ 144	\$ 1,732	(91.7)%
% of net revenue	0.0%	0.1%	

Interest expense consists primarily of interest paid on capital lease obligations. Interest expense decreased by \$1.6 million in fiscal 2011 compared to fiscal 2010 primarily due to repayment of capital lease obligations.

*Provision (Benefit) for Income Taxes*

	Fiscal Years Ended		
	January 29, 2011	January 30, 2010	% Change in 2011
	(in thousands, except percentage)		
Provision (benefit) for income taxes	\$ 6,333	\$ (10,346)	(161.2)%
% of net revenue	0.2%	(0.4)%	



**Table of Contents**

Our effective tax rate was an expense of 0.7% for fiscal 2011 compared to a benefit of 3.0% for fiscal 2010. The increase in the provision for taxes in 2011 was primarily due to releases of tax contingency reserves in fiscal 2010. During fiscal 2010, we released \$34.1 million in uncertain tax positions (including interest and penalties) due to the expiration of the statute of limitations in multiple jurisdictions, compared to \$13.8 million in fiscal 2011. In fiscal 2011, the tax rate also benefited from a reduction in our valuation allowance of \$3.4 million due to the completion of a non-US audit. We continued to incur significant non-tax deductible expenses such as stock-based compensation expenses and intangible amortization resulting in lower profit before tax in jurisdictions where we are not able to utilize the tax benefits. In addition, the tax benefits associated with our tax incentives vary from year to year based on the relative profitability in Israel, Singapore and Switzerland.

**Years Ended January 30, 2010 and January 31, 2009***Net Revenue*

	<b>Fiscal Years Ended</b>		
	<b>January 30, 2010</b>	<b>January 31, 2009</b>	<b>% Change in 2010</b>
	<b>(in thousands, except percentage)</b>		
Net revenue	\$ 2,807,687	\$ 2,950,563	(4.8)%

Our net revenue in fiscal 2010 declined by \$142.9 million as compared to fiscal 2009 as the impacts of the global economic downturn outpaced the growth in some of our existing and emerging businesses. Although fiscal 2010 was a challenging year as a result of the overall macroeconomic conditions, we experienced several positive factors including growth in our storage businesses due to new hard disk drive programs at key existing and new customers. Our storage businesses grew approximately 7.5% during fiscal 2010 as compared to fiscal 2009, contributing more than half of our net revenue. Within our networking businesses, our enterprise switching and system controller devices ramped up during the year helping to offset declines in our network interface card and PHY business. Our networking businesses overall grew by approximately 2% during fiscal 2010 as compared to fiscal 2009, contributing approximately 20% of our net revenue. Within our mobile and wireless business, we experienced significant growth in our embedded wireless products as a result of strength in several gaming platforms. Despite those positives, the economic slowdown adversely impacted consumer spending, which led to significant declines in our cellular handheld business. Overall our mobile and wireless businesses declined by over 25% in fiscal 2010 as compared to fiscal 2009, contributing just under 20% of our net revenue. The remainder of our revenue, primarily related to our printer business declined by nearly 45% in fiscal 2010 as compared to fiscal 2009 as a result of the economic slowdown. This portion of our business made up approximately 3% of our net revenue in fiscal 2010.

*Cost of Goods Sold*

	<b>Fiscal Years Ended</b>		
	<b>January 30, 2010</b>	<b>January 31, 2009</b>	<b>% Change in 2010</b>
	<b>(in thousands, except percentages)</b>		
Cost of goods sold	\$ 1,227,096	\$ 1,426,624	(14.0)%
% of net revenue	43.7%	48.4%	

Cost of goods sold as a percentage of net revenue in fiscal 2010 decreased significantly compared to fiscal 2009 primarily due to lower material and manufacturing costs as a result of cost reduction efforts with our foundry, assembly and test subcontractors as well as the on-going focus on yield improvements. In addition, cost of goods sold as a percentage of net revenue decreased due to the mix of products, including newer products with better margin structures, better inventory management, which led to lower excess and obsolescence provisions, and the sales of previously written down inventory.

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

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Research and development	\$ 828,176	\$ 935,272	(11.5)%
% of net revenue	29.5%	31.7%	

Research and development expenses decreased by \$107.1 million in fiscal 2010 compared to fiscal 2009 partially due to the benefit of \$26.4 million of research and development funding from customers for development work in fiscal 2010. In addition, stock-based compensation decreased \$37.1 million due to older options with relatively higher valuation becoming fully vested along with the impact of our stock option exchange programs. Mask, wafer and product related costs decreased \$15.7 million primarily due to lower pricing and volume of tape outs. Other decreases in research and development expenses of \$29.7 million were related to lower discretionary spending due to tight cost controls. Partially offsetting the decrease in expense was an increase in restructuring costs of \$9.8 million. Finally, the cost savings related to lower overall headcount were partially offset by higher bonus related costs as we implemented new programs to compensate employees for strong performance. Beginning in fiscal 2010, research and development funding from customers for development work was recognized as a credit to research and development expense under the proportionate performance method as the underlying work was performed.

*Selling and Marketing*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Selling and marketing	\$ 139,404	\$ 161,703	(13.8)%
% of net revenue	5.0%	5.5%	

Selling and marketing expense decreased \$22.3 million in fiscal 2010 compared to fiscal 2009 primarily due to lower salary and related costs of \$6.5 million due to lower headcount. Stock-based compensation decreased \$9.8 million due to older options with relatively higher valuation becoming fully vested along with the impact of our stock option exchange programs and the other changes implemented during fiscal 2010. Additionally, sales rep commissions decreased \$3.8 million due to slightly lower revenue and various other selling and marketing expenses decreased \$1.7 million due to cost control efforts. These amounts were partially offset by higher tradeshow and advertising related expenses of approximately \$2.6 million as we significantly increased our efforts in these areas.

*General and Administrative*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
General and administrative	\$ 171,362	\$ 108,465	58.0%
% of net revenue	6.1%	3.7%	

General and administrative expense increased \$62.9 million in fiscal 2010 compared to fiscal 2009 as a result of the \$72.0 million legal settlement recorded during fiscal 2010 in connection with the settlement of the class action securities litigation related to our historical stock option granting practices. In addition, legal fees, on a net basis, increased by \$4.8 million primarily due to \$24.5 million of insurance recoveries related to certain litigation activity received in fiscal 2009 which did not recur in fiscal 2010. These were partially offset by a \$10.0 million settlement with the SEC regarding our historical stock option granting practices and related

## Table of Contents

accounting matters also recorded in fiscal 2009 which did not recur in fiscal 2010. Excluding the insurance reimbursements, legal fees were lower by approximately \$9.7 million due to lower overall legal activity due to the settlement of various litigation matters. Restructuring costs increased \$1.1 million in connection with actions implemented in response to the economic downturn. Partially offsetting the increase in general and administrative expense was a decrease of \$2.7 million in stock-based compensation. Finally, various other general and administrative expenses such as outside services, consulting, temporary services and other decreased by \$11.4 million due to cost control efforts.

### *Amortization and Write-Off of Acquired Intangible Assets*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Amortization and write-off of acquired intangible assets	\$ 107,534	\$ 153,323	(29.9)%
% of net revenue	3.8%	5.2%	

The decrease in amortization and write-off of acquired intangible assets of \$45.8 million in fiscal 2010 compared to fiscal 2009 is due to certain acquired intangible assets from previous acquisitions being fully amortized and to the partial write-off of certain purchased technology from a previous acquisition. In fiscal 2010, we determined that certain acquisition-related intangibles associated with the acquisition of the ICAP Business were partially impaired. The primary reason for the partial write-off of certain purchased intangibles from the ICAP Business was due to the transition to a newer product by a large customer. The amount of the purchased intangibles written-off in fiscal 2010 due to impairment was \$1.0 million. In fiscal 2009, we determined that certain acquisition-related intangibles associated with the acquisition of the semiconductor business of UTStarcom, Inc. (the UTStarcom Business), PicoMobile Networks, Inc. and the ICAP Business were impaired. The primary reason for the write-off of the remaining purchased intangibles from the UTStarcom Business and certain intangibles from the ICAP Business was due to declining revenue from products incorporating such purchased intangibles. The purchased intangibles from the PicoMobile acquisition were written-off due to a delay in the deployment of the technology within the industry. The amount of the purchased intangibles written-off in the fourth quarter of fiscal 2009 due to impairment was \$15.6 million.

### *Interest and Other Income*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Interest and other income	\$ 10,727	\$ 23,651	(54.6)%
% of net revenue	0.4%	0.8%	

Interest and other income consists primarily of interest earned on cash, cash equivalents and short-term investment balances, gains and losses on the sale of marketable securities, foreign currency impact and various other gains and losses. The decrease in interest and other income of \$12.9 million is due primarily to favorable foreign exchange impacts related to foreign tax reserves as a result of the strengthening U.S. dollar in fiscal 2009. In fiscal 2010, we experienced foreign exchange losses related to foreign tax reserves as a result of fluctuations in currencies and the weakening of the U.S. dollar. In addition, interest income decreased \$9.2 million due to the decline in market interest rates on our cash and cash equivalents and short-term investments. Partially offsetting the decrease in interest and other income in fiscal 2010 was \$8.0 million of gains on a severance fund in a foreign jurisdiction and a \$4.9 million gain on an equity investments in privately held companies during fiscal 2010.



**Table of Contents***Interest Expense*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Interest expense	\$ 1,732	\$ 17,994	(90.4)%
% of net revenue	0.1%	0.6%	

Interest expense consists primarily of interest paid on debt and capital lease obligations. Interest expense decreased by \$16.3 million in fiscal 2010 compared to fiscal 2009 primarily due to repayment of the entire principal on the outstanding term loan obligation in the fourth quarter of fiscal 2009.

*Provision (Benefit) for Income Taxes*

	Fiscal Years Ended		
	January 30, 2010	January 31, 2009	% Change in 2010
	(in thousands, except percentages)		
Provision (benefit) for income taxes	\$ (10,346)	\$ 23,591	(143.9)%
% of net revenue	(0.4)%	0.8%	

Our effective tax rate was a benefit of 3.0% for fiscal 2010 compared to an expense of 13.8% for fiscal 2009. The decrease in fiscal 2010 effective tax rate compared to fiscal 2009 was primarily due to releases of tax contingency reserves including penalties and interest of \$34.1 million due to the expiration of the statute of limitations in multiple jurisdictions. We continued to incur significant non-tax deductible expenses such as stock-based compensation expenses and intangible amortization resulting in lower profit before tax in jurisdictions where we are not able to utilize the tax benefits.

**Liquidity and Capital Resources**

Our principal source of liquidity as of January 29, 2011 consisted of approximately \$2.9 billion of cash, cash equivalents and short-term investments as well as cash from operations. We believe that our existing cash, cash equivalents and investments, together with cash generated from operations, will be sufficient to cover our working capital needs, capital expenditures, investment requirements and commitments for at least the next 12 months.

*Net Cash Provided by Operating Activities*

Net cash provided by operating activities was \$1.2 billion for fiscal 2011 compared to \$811.5 million for fiscal 2010 and \$680.7 million for fiscal 2009. The cash inflows from operations during fiscal 2011 were primarily due to \$1.2 billion of net income adjusted for non-cash items.

Within working capital during fiscal 2011, accounts payable increased by \$48.6 million due to higher levels of purchasing to support our business. Deferred income increased by \$16.8 million as the inventory levels at our distributors were higher at the end of fiscal 2011. Accrued employee compensation increased by \$20.7 million due to higher accruals for incentive compensation programs due to the higher levels of revenue and operating income in fiscal 2011 compared to fiscal 2010. Accounts receivable increased \$102.6 million due to higher levels of revenue.

During fiscal 2011, other non-current assets and other long-term liabilities both decreased significantly compared to fiscal 2010, primarily as a result of the conversion of our severance plan for our employees in Israel. Please see Note 11 Benefit Plans 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 details.

## **Table of Contents**

The cash inflow from operating activities in fiscal 2010 were due to net income of \$684.7 million adjusted for non-cash items changes in working capital items. Within working capital during fiscal 2010, accounts payable increased \$144.3 million due to our on-going efforts to manage payment terms with vendors. In addition, inventories decreased by \$69.1 million as we reduced our inventory levels earlier in fiscal 2010 in light of the economic downturn and have experienced capacity constraints as we have attempted to restore the levels to support our anticipated revenues. Accrued employee compensation increased by \$33.8 million due primarily to the reinstatement of the performance bonus program in fiscal 2010. Significant working capital changes offsetting cash inflows in fiscal 2010 included an increase in accounts receivable of \$134.7 million due primarily to the timing of revenue whereby more revenue was recorded toward the end of the fourth quarter of fiscal 2010 compared to fiscal 2009.

The cash inflows from operations in fiscal 2009 were due to net income of \$147.2 million adjusted for non-cash items and changes in working capital. Within working capital during fiscal 2009, inventories decreased \$108.8 million primarily due to the completion of contractual obligations under an acquisition related supply agreement as well as concentrated efforts to reduce inventory levels. Accounts receivable also decreased \$109.9 million due primarily to lower revenue recorded toward the end of the quarter as well as the timing of payments received from customers. Prepaid expenses and other assets decreased by \$44.5 million due primarily to the utilization of prepaid foundry capacity and prepaid wafers. Accounts payable decreased \$92.1 million due to lower manufacturing volumes and overall activity at year end as we tried to control inventory levels due to lower revenue levels. Also contributing to the use of cash in operating activities was a decrease in accrued liabilities of \$39.8 million. The decrease in other accrued liabilities was primarily attributable to the payment of accrued contingent consideration as certain milestones were met related to various acquisitions. Accrued employee compensation also decreased by \$26.0 million due to lower bonus accruals for comparable periods.

### ***Net Cash Used in Investing Activities***

Net cash used in investing activities was \$529.3 million for fiscal 2011 compared to \$744.0 million for fiscal 2010 and \$64.7 million for fiscal 2009. The net cash used in investing activities in fiscal 2011 was primarily due to net purchases of investments of \$395.8 million. In addition, we purchased \$90.2 million of property and equipment mainly to support additional capacity, paid \$29.4 million for acquisitions and purchased \$23.1 million of technology licenses. The net cash used in investing activities in fiscal 2010 was primarily due to net purchases of short-term investments of \$686.6 million as we began to ramp up our new investment strategy, purchases of property and equipment of \$39.8 million mainly to support additional capacity and purchases of technology licenses of \$15.6 million to help accelerate product development in certain applications. The net cash used in investing activities in fiscal 2009 was primarily due to purchases of property and equipment of \$73.2 million, purchases of technology licenses of \$5.2 million and cash paid for an acquisition of \$5.3 million partially offset by net sales and maturities of investments of \$19.0 million.

### ***Net Cash Provided by (Used In) Financing Activities***

Net cash provided by financing activities was \$77.4 million for fiscal 2011 compared to \$110.5 million for fiscal 2010 and net cash used in financing activities of \$304.2 million for fiscal 2009. For fiscal 2011, net cash provided by financing activities was primarily attributable to proceeds from the issuance of common shares under our stock option plan and employee stock purchase plan of \$166.0 million, which was partially offset by share repurchases under our new share repurchase program. We repurchased 4.9 million shares for a total of \$87.5 million in fiscal 2011. In fiscal 2010, net cash provided by financing activities was attributable to proceeds from the issuance of common shares under our stock option plan and employee stock purchase plan of \$111.6 million which was partially offset by payments on capital leases of \$1.8 million. In fiscal 2009, net cash used in financing activities was attributable to repayment of term loan obligations and capital leases of \$397.2 million, which was partially offset by proceeds from the issuance of common shares under our stock option plans of \$92.6 million.

**Table of Contents****Contractual Obligations and Commitments**

Under our manufacturing relationships with our foundry partners, cancellation of outstanding purchase orders are allowed but require repayment of all expenses incurred through the date of cancellation. As of January 29, 2011, the total value of open purchase orders with these foundries were approximately \$256.8 million.

In February 2005 and as amended in March 2005, we entered into an agreement with a foundry to secure foundry fabrication capacity for a fixed number of wafers at agreed upon prices for a period of five and a half years beginning on October 1, 2005. In return, we agreed to pay the foundry \$174.2 million over a period of 18 months. The amendment extended the term of the agreement and the agreed upon pricing terms. As of January 29, 2011, all payments had been made and approximately \$163.9 million of the prepayment had been utilized. At January 29, 2011, there were no outstanding commitments under the agreement.

The following table summarizes our contractual obligations as of January 29, 2011 and the effect that such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	Fiscal 2012	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Thereafter	Total
<b>Contractual obligations:</b>							
Facilities operating leases, net	\$ 17,086	13,083	9,481	6,863	6,259	1,526	\$ 54,298
CAD and other operating leases	45,789	45,013	13,018	8,563	1,078	4,492	117,953
Capital Lease Obligations (1)	521						521
Purchase commitments to foundries	256,849						256,849
Capital purchase obligations	14,615						14,615
Other long-term obligations (1)		18,601	9,100	6,672	4,499	1,751	40,623
<b>Total contractual cash obligations</b>	<b>\$ 334,860</b>	<b>\$ 76,697</b>	<b>\$ 31,599</b>	<b>\$ 22,098</b>	<b>\$ 11,836</b>	<b>\$ 7,769</b>	<b>\$ 484,859</b>

(1) Amounts represent anticipated future cash payments, including anticipated interest payments not recorded on the consolidated balance sheet. In addition to the above commitments and contingencies, as of January 29, 2011, we had recorded \$86.7 million of unrecognized tax benefits as liabilities in accordance with ASC 740-10. We also had recorded a liability for potential interest and penalties of \$25.9 million and \$7.5 million, respectively, as of January 29, 2011. During the next 12 months, we believe that tax audit resolutions and the expiration of applicable statutes of limitations could potentially reduce our unrecognized tax benefit by up to \$14.4 million. However, this amount could change because we may have negotiations with various tax authorities throughout the year. At this time, we are unable to make a reasonably reliable estimate of the amount of payments in individual years beyond 12 months due to uncertainties in the timing of tax audit outcomes.

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities of financial partnerships, such as entities often referred to as structured finance or special purpose entities (SPEs), which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of January 29, 2011, we were not involved in any unconsolidated SPE transactions.

*Prospective capital needs:* We believe that our existing cash, cash equivalents and short-term investments, together with cash generated from operations, from exercise of employee stock options and purchases under our employee stock purchase plan will be sufficient to cover our working capital needs, capital expenditures, investment requirements and commitments for at least the next 12 months. Our capital requirements will depend on many factors, including our rate of sales growth, market acceptance of our products, costs of securing access

## **Table of Contents**

to adequate manufacturing capacity, the timing and extent of research and development projects, costs of making improvements to facilities and increases in operating expenses, which are all subject to uncertainty. However, we are named as defendants to several litigation actions and an unfavorable outcome in such actions could have a material adverse effect on our cash flows.

To the extent that our existing cash, cash equivalents and investment balances and cash generated by operations are insufficient to fund our future activities, we may need to raise additional funds through public or private debt or equity financing. We may enter into additional acquisitions of businesses, assets, products, technologies or other strategic arrangements in the future, which could also require us to seek debt or equity financing. Additional equity financing or convertible debt financing may be dilutive to our current shareholders. If we elect to raise additional funds, we may not be able to obtain such funds on a timely basis or on acceptable terms, if at all. If we raise additional funds by issuing additional equity or convertible debt securities, the ownership percentages of existing shareholders would be reduced. In addition, the equity or debt securities that we issue may have rights, preferences or privileges senior to our common shares.

### **Recent Accounting Pronouncements**

Please see Note 1 The Company and its Significant Accounting Policies for further details in our notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Form 10-K.

### **Related Party Transactions**

Please see Note 14 Related Party Transactions for further details in our notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Form 10-K.

### **Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

*Interest Rate Risk.* Our interest rate risk relates primarily to our fixed income short-term investment portfolio as we do not have any outstanding debt as of January 29, 2011. We maintain an investment policy that requires minimum short-term and long-term credit ratings, diversification of credit risk and limits the long-term interest rate risk by requiring maturities of less than five years. We invest our excess cash primarily in highly liquid debt instruments of the U.S. government and its agencies, time deposits, money market mutual funds, and corporate debt securities. These investments are generally classified as available-for-sale and, consequently, are recorded on our balance sheets at fair market value with their related unrealized gain or loss reflected as a component of accumulated other comprehensive income in shareholders equity. Investments in both fixed rate and floating rate interest earning securities carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall.

To provide an assessment of the interest rate risk associated with our investment portfolio, we performed a sensitivity analysis to determine the impact that an adverse change in interest rates would have on the value of the investment portfolio. Based on investment positions as of January 29, 2011, a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$10.4 million incremental decline in the fair market value of the portfolio. Due to our positive cash flow from operations, the relatively short-term nature of our investment portfolio and our ability to hold investments to maturity, such change in fair market value would likely not result in any cash flow impact.

As of January 29, 2011 our investment portfolio included \$27.9 million in par value of auction rate securities. Beginning in February 2008, liquidity issues in the global credit markets resulted in a failure of auction rate securities, as the amount of securities submitted for sale in those auctions exceeded the amount of bids. To estimate the fair value of the auction rate securities since that time, we have used a discounted cash flow

## **Table of Contents**

model based on estimated timing and amount of future interest and principal payments, credit quality of the underlying securities and liquidity considerations, the collateralization of underlying security investments, the credit worthiness of the issuer of the securities, the probability of full repayment and other considerations. As of January 29, 2011, the fair value of auction rate securities was \$1.6 million less than par value and recorded in long-term investments.

Based on balance of approximately \$2.9 billion in cash, cash equivalents and short-term investments and the fact that we continue to generate positive cash flow on a quarterly basis, we do not anticipate having to sell these securities below par value in order to operate our business. We do not have the intent to sell these auction rate securities until recovery and it is more likely than not that we will not be required to sell the auction rate securities prior to recovery. Thus we consider the impairment to be temporary and recorded the unrealized loss to accumulated other comprehensive income (loss), a component of shareholders' equity.

*Investment Risk.* We invest in equity instruments of privately held companies for strategic purposes. These investments, which totaled \$3.9 million at January 29, 2011, are included in other non-current assets in the accompanying balance sheets and are accounted for under the cost method because our ownership is less than 20% and we do not have the ability to exercise significant influence over the operations of these companies. We monitor these investments for impairment and make appropriate reductions in carrying value when an impairment is deemed to be other-than-temporary.

*Foreign Currency Exchange Risk.* Substantially all of our sales and the majority of our expenses are denominated in U.S. dollars. Since we operate in many countries, we pay certain payroll and other operating expenses in local currencies and these expenses may be higher or lower in U.S. dollar terms. Furthermore, our operation in Israel represents a large portion of our total foreign currency exposure. We may also hold certain assets and liabilities, including potential tax liabilities in local currency on our balance sheet. These tax liabilities would be settled in local currency, therefore foreign exchange gains and losses from remeasuring the tax liabilities are recorded to other income and expense. The related effects of foreign exchange fluctuations on local currency expenses are recorded to operating expenses. Significant fluctuations in exchange rates in countries where we incur expenses or record assets or liabilities in local currency could affect our business and operating results in the future. There is also a risk that our customers may be negatively impacted in their ability to purchase our products priced in U.S. dollars when there has been significant volatility in foreign currency exchange rates.

We engage in hedging transactions to help mitigate some of the volatility to forecasted cash flows due to changes in foreign exchange rates, and in particular hedge a portion of the forecasted Israel Shekel expenses. We will enter into short-term forward exchange contracts, typically less than 12 months in duration, to hedge exposures for expenses and purchases denominated in foreign currencies when the currency exposure is significant and there is a high certainty of the underlying cash flow. We do not enter into derivative financial instruments for trading or speculative purposes. We may choose not to hedge certain foreign exchange exposures due to immateriality, offsetting exposures, prohibitive economic cost of hedging a particular currency, and limited availability of appropriate hedging instruments. To the extent our foreign currency hedges are effective, the results of the hedge activities offset the underlying expense within the operating expense. De-designated hedges or hedges deemed ineffective are recorded in other income and expense. We do not hedge our tax liabilities denominated in local currency on our balance sheet as the timing of these tax liabilities becoming cash flows is not deemed to be certain.

To provide an assessment of the foreign currency exchange risk associated with our foreign currency exposures within operating expense, we performed a sensitivity analysis to determine the impact that an adverse change in exchange rates would have on our financial statements. If the U.S. dollar weakened by 10%, our operating expense could increase by 2.9%. We expect our hedges of foreign currency exposures to be highly effective and offset a significant portion of the short-term impact of changes in exchange rates.

**Table of Contents**

**Item 8.      *Financial Statements and Supplementary Data***

**INDEX**

	<b>Page</b>
<u>Report of Independent Registered Public Accounting Firm</u>	59
<u>Consolidated Balance Sheets as of January 29, 2011, and January 30, 2010</u>	60
<u>Consolidated Statements of Operations for the years ended January 29, 2011, January 30, 2010, and January 31, 2009</u>	61
<u>Consolidated Statements of Shareholders' Equity for the years ended January 29, 2011, January 30, 2010, and January 31, 2009</u>	62
<u>Consolidated Statements of Cash Flows for the years ended January 29, 2011, January 30, 2010, and January 31, 2009</u>	63
<u>Notes to Consolidated Financial Statements</u>	64

---

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Marvell Technology Group Ltd.

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Marvell Technology Group Ltd. and its subsidiaries at January 29, 2011 and January 30, 2010 and the results of their operations and their cash flows for each of the three years in the period ended January 29, 2011 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 29, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP

San Jose, California

March 25, 2011

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****CONSOLIDATED BALANCE SHEETS**

	January 29, 2011	January 30, 2010
	(In thousands, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,847,074	\$ 1,105,428
Short-term investments	1,082,956	691,289
Accounts receivable, net of allowances of \$7,366 and \$5,912	459,406	356,796
Inventories	245,448	241,541
Prepaid expenses and other current assets	66,945	62,527
Deferred income taxes	10,818	7,964
Total current assets	3,712,647	2,465,545
Property and equipment, net	358,440	342,497
Long-term investments	26,226	34,281
Goodwill	2,004,833	1,997,662
Acquired intangible assets, net	124,631	179,101
Other non-current assets	111,380	151,854
Total assets	\$ 6,338,157	\$ 5,170,940
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 332,007	\$ 283,362
Accrued liabilities	85,483	81,379
Accrued employee compensation	146,524	125,810
Deferred income	76,161	59,396
Current portion of capital lease obligations	511	1,940
Total current liabilities	640,686	551,887
Capital lease obligations, net of current portion		511
Non-current income taxes payable	136,262	131,963
Other long-term liabilities	39,340	68,600
Total liabilities	816,288	752,961
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock, \$0.002 par value; 8,000 shares authorized; no shares issued and outstanding		
Common stock, \$0.002 par value; 992,000 shares authorized; 659,372 and 638,341 shares issued and outstanding, respectively	1,317	1,277
Additional paid-in capital	4,805,588	4,607,844
Accumulated other comprehensive income (loss)	1,092	(885)
Retained earnings (accumulated deficit)	713,872	(190,257)
Total shareholders' equity	5,521,869	4,417,979
Total liabilities and shareholders' equity	\$ 6,338,157	\$ 5,170,940



See accompanying Notes to Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****CONSOLIDATED STATEMENTS OF OPERATIONS**

	<b>January 29, 2011</b>	<b>January 30, 2010</b>	<b>January 31, 2009</b>
	<b>(In thousands, except per share amounts)</b>		
Net revenue	\$ 3,611,893	\$ 2,807,687	\$ 2,950,563
Operating costs and expenses:			
Cost of goods sold	1,473,274	1,227,096	1,426,624
Research and development	897,578	828,176	935,272
Selling and marketing	155,481	139,404	161,703
General and administrative	104,830	171,362	108,465
Amortization and write-off of acquired intangible assets	79,538	107,534	153,323
Total operating costs and expenses	2,710,701	2,473,572	2,785,387
Operating income	901,192	334,115	165,176
Interest and other income	9,414	10,727	23,651
Interest expense	(144)	(1,732)	(17,994)
Income before income taxes, net	910,462	343,110	170,833
Provision (benefit) for income taxes	6,333	(10,346)	23,591
Net income	\$ 904,129	\$ 353,456	\$ 147,242
Net income per share:			
Basic	\$ 1.39	\$ 0.57	\$ 0.24
Diluted	\$ 1.34	\$ 0.54	\$ 0.23
Weighted average shares:			
Basic	648,347	623,934	608,747
Diluted	676,878	653,741	630,328

See accompanying Notes to Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss) (In thousands)	Accumulated Income (Deficit)	Total
	Shares	Amount				
Balance at February 2, 2008	599,971	\$ 1,200	\$ 4,100,659	\$ 615	\$ (690,955)	\$ 3,411,519
Shares issued pursuant to stock options and awards, net	10,790	21	56,899			56,920
Issuance of common stock under the employee stock purchase plan	3,947	8	33,350			33,358
Issuance of common stock on exercise of warrants	1,680	4	2,408			2,412
Stock-based compensation			178,999			178,999
Tax benefit from employee stock transactions			(50)			(50)
Comprehensive income (loss):						
Unrealized loss on available-for-sale investments, net of tax				(1,333)		(1,333)
Net income					147,242	147,242
Total comprehensive income						145,909
Balance at January 31, 2009	616,388	\$ 1,233	\$ 4,372,265	\$ (718)	\$ (543,713)	\$ 3,829,067
Shares issued pursuant to stock options and awards, net	14,674	29	45,864			45,893
Issuance of common stock under the employee stock purchase plan	7,279	15	65,737			65,752
Stock-based compensation			124,140			124,140
Tax benefit from employee stock transactions			(162)			(162)
Comprehensive income (loss):						
Unrealized gain on available-for-sale investments, net of tax				77		77
Unrealized gain on cash flow hedges				341		341
Other				(585)		(585)
Net income					353,456	353,456
Total comprehensive income						353,289
Balance at January 30, 2010	638,341	\$ 1,277	\$ 4,607,844	\$ (885)	\$ (190,257)	\$ 4,417,979
Shares issued pursuant to stock options and awards, net	15,077	28	108,587			108,615
Issuance of common stock under the employee stock purchase plan	10,885	22	57,316			57,338
Stock-based compensation			118,857			118,857
Tax benefit from employee stock transactions			460			460
Repurchase of common stock	(4,931)	(10)	(87,476)			(87,486)
Comprehensive income (loss):						
Unrealized gain on available-for-sale investments, net of tax				3,112		3,112
Unrealized loss on cash flow hedges				(1,134)		(1,134)
Other				(1)		(1)

# Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Net income						904,129	904,129
Total comprehensive income							906,106
Balance at January 29, 2011	659,372	\$ 1,317	\$ 4,805,588	\$ 1,092	\$ 713,872		\$ 5,521,869

See accompanying Notes to Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

	January 29, 2011	January 30, 2010 (In thousands)	January 31, 2009
<b>Cash flows from operating activities:</b>			
Net income	\$ 904,129	\$ 353,456	\$ 147,242
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	93,190	99,214	112,824
Stock-based compensation	118,405	126,599	177,132
Amortization and write-off of acquired intangible assets	79,538	107,534	153,323
Gain on equity investments	(5,927)	(4,938)	
Facility impairment	1,140	3,986	
Gain on investments	13,508	1,667	
Fair market value adjustment to inventory sold	(2,391)	(15,509)	(15,359)
Excess tax benefits from stock-based compensation	(899)	(677)	(365)
Deferred income tax	4,113	13,356	(17,468)
Changes in assets and liabilities, net of assets acquired and liabilities assumed in acquisitions:			
Restricted cash		24,500	(24,500)
Accounts receivable	(102,610)	(134,695)	109,919
Inventories	(1,264)	82,659	126,938
Prepaid expenses and other assets	50,236	(4,326)	63,476
Accounts payable	42,464	142,002	(88,795)
Accrued liabilities and other	(38,059)	(32,268)	(25,201)
Accrued employee compensation	21,210	33,292	(26,956)
Deferred income	16,765	15,661	(11,525)
Net cash provided by operating activities	1,193,548	811,513	680,685
<b>Cash flows from investing activities:</b>			
Purchases of investments	(1,264,517)	(804,979)	(10,172)
Sales and maturities of investments	868,759	118,362	29,181
Cash paid for acquisitions, net	(29,446)		(5,287)
Purchases of equity investments		(2,000)	
Purchases of property and equipment	(90,173)	(39,814)	(73,243)
Proceeds from sale of equity investments	9,192		
Purchases of technology licenses	(23,144)	(15,598)	(5,200)
Net cash used in investing activities	(529,329)	(744,029)	(64,721)
<b>Cash flows from financing activities:</b>			
Repurchase of common stock	(87,486)		
Proceeds from employee stock plans	165,954	111,645	92,645
Principal payments on capital lease and term loan obligations	(1,940)	(1,787)	(397,213)
Excess tax benefits from stock-based compensation	899	677	365
Net cash provided by (used in) financing activities	77,427	110,535	(304,203)
Net increase in cash and cash equivalents	741,646	178,019	311,761
Cash and cash equivalents at beginning of period	1,105,428	927,409	615,648

# Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Cash and cash equivalents at end of period	\$ 1,847,074	\$ 1,105,428	\$ 927,409
--	--------------	--------------	------------

## **Supplemental cash flow information:**

Cash paid for interest	\$ 144	\$ 297	\$ 20,787
------------------------	--------	--------	-----------

Cash paid for income taxes, net	\$ 12,239	\$ 4,836	\$ 17,232
---------------------------------	-----------	----------	-----------

## **Non-Cash Investing Activities:**

Receivable from sale of equity investment	\$	\$ 7,681	\$
---	----	----------	----

See accompanying Notes to Consolidated Financial Statements.

## **Table of Contents**

### **MARVELL TECHNOLOGY GROUP LTD.**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

##### **Note 1 The Company and its Significant Accounting Policies:**

###### ***The Company***

Marvell Technology Group Ltd., a Bermuda company (the "Company"), is a leading global semiconductor provider of high-performance application specific standard products. The Company's core strength of expertise is the development of complex System-on-a-Chip devices leveraging its extensive technology portfolio of intellectual property in the areas of analog, mixed-signal, digital signal processing and embedded ARM-based microprocessor integrated circuits. The Company develops platforms that it defines as integrated hardware and software that incorporate digital computing technologies designed and configured to provide an optimal computing solution compared to individual components. The Company's broad product portfolio includes devices for data storage, enterprise-class Ethernet data switching, Ethernet physical-layer transceiver handheld cellular, Ethernet-based wireless networking, personal area networking, Ethernet-based PC connectivity, control plane communications controllers, video-image processing and power management solutions.

###### ***Basis of Presentation***

The Company's fiscal year is the 52- or 53-week period ending on the Saturday closest to January 31. In a 52-week year, each fiscal quarter consists of 13 weeks. The additional week in a 53-week year is added to the fourth quarter, making such quarter consist of 14 weeks. Fiscal years 2011, 2010 and 2009 were comprised of 52-week periods.

Certain reclassifications have been made to prior period balances in order to conform to the current period's presentation.

###### ***Use of Estimates***

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States ("GAAP") requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, including those related to performance based compensation, revenue recognition, including provisions for sales returns and allowances, inventory excess and obsolescence, investment fair values, goodwill and other intangible assets income taxes, litigation and other contingencies. In addition, the Company uses assumptions when employing the Black-Scholes option valuation model to calculate the fair value of stock-based awards granted. The Company bases its estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, when these carrying values are not readily available from other sources. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods.

###### ***Principles of Consolidation***

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated. The functional currency of the Company and its subsidiaries is the United States dollar.

###### ***Cash and Cash Equivalents***

The Company considers all highly liquid investments with a maturity of three months or less from the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks, time deposits, federal agency notes, commercial paper, and money market funds.

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Restricted Cash***

Restricted cash consisted of proceeds of insurance recoveries that the Company offset against payments that it was required to make in settlements related to the Company's historic stock option granting practices. The final payments were made during fiscal 2010.

***Investments***

The Company's marketable investments are classified as available-for-sale and are reported at fair value. Unrealized gains and losses of the Company's available-for-sale securities are excluded from earnings and reported as a component of accumulated other comprehensive income (loss). The Company assesses whether an other-than-temporary impairment loss on its available-for-sale and trading securities has occurred due to declines in fair value or other market conditions. Declines in fair value that are considered other-than-temporary are recorded as an impairment of investments in interest and other income, net within the Consolidated Statements of Operations.

In general, investments with original maturities of greater than 90 days and remaining maturities of less than one year are classified as short-term investments. Investments with maturities beyond one year may also be classified as short-term based on their highly liquid nature and because such investments represent the investment of cash that is available for current operations.

The Company also has equity investments in privately-held companies. These investments are recorded at cost and are included in other non-current assets. The Company accounts for these investments under the cost method because its ownership is less than 20% and it does not have the ability to exercise significant influence over the operations of these companies. The Company monitors these investments for impairment and makes appropriate reductions in carrying value when impairment is deemed to be other than temporary.

***Impairment of Investments***

If a debt security's market value is below amortized cost and the Company either intends to sell the security or it is more likely than not that the Company will be required to sell the security before its anticipated recovery, the Company records an other-than-temporary impairment charge to interest and other income, net within the Consolidated Statements of Operations. However, if an impairment is due to credit losses, the Company considers other credit factors to account for the impairment loss.

***Derivative Financial Instruments***

The Company accounts for its derivative instruments as either assets or liabilities and carries them at fair value. Derivatives that are not defined as hedges must be adjusted to fair value through earnings. For derivative instruments that hedge the exposure to variability in expected future cash flows and are designated as cash flow hedges, the effective portion of the gain or loss on the derivative instrument is reported as a component of accumulated other comprehensive income (loss) in shareholders' equity and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument is recognized in current earnings. To receive hedge accounting treatment, cash flow hedges must be highly effective in offsetting changes to expected future cash flows on hedged transactions.

***Concentration of Credit Risk and Significant Customers***

Financial instruments that potentially subject the Company to a significant concentration of credit risk consist principally of cash equivalents, short-term investments and accounts receivable. Cash, cash equivalents



**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

and short-term investment balances are maintained with high quality financial institutions, the composition and maturities of which are regularly monitored by management. The Company believes that the concentration of credit risk in its trade receivables with respect to its served markets, as well as the contracted customer base located primarily in the Asia Pacific Region, are substantially mitigated by the Company's credit evaluation process, relatively short collection terms and the high level of credit worthiness of its customers. The Company performs ongoing credit evaluations of its customers' financial conditions and limits the amount of credit extended when deemed necessary based upon payment history and the customer's current credit worthiness, but generally requires no collateral. The Company regularly reviews the allowance for bad debt and doubtful accounts by considering factors such as historical experience, credit quality, age of the accounts receivable balances and current economic conditions that may affect a customer's ability to pay.

The allowance for doubtful accounts at January 29, 2011, January 30, 2010, and January 31, 2009 was \$1.2 million, 1.0 million, and \$0.9 million, respectively. Please see Revenue Recognition policy in this Note 1 The Company and its Significant Accounting Policies for additional information on sales returns and allowances.

During fiscal 2010, Toshiba acquired the hard disk drive operations of Fujitsu. Although Toshiba and Fujitsu revenue have not historically accounted for more than 10% of the Company's revenue, the Company has combined fiscal 2010 revenue for Toshiba and Fujitsu together for reporting purposes. Toshiba represented less than 10% of the Company's net revenue in fiscal 2011 and fiscal 2009, and approximately 15% of net revenue in 2010.

The following table sets forth sales to end customers comprising 10% or more of the Company's net revenue for the periods indicated:

<b>Customer</b>	<b>January 29, 2011</b>	<b>Year Ended January 30, 2010</b>	<b>January 31, 2009</b>
Western Digital	21%	24%	21%
Research in Motion	14%	*	*
Toshiba	*	15%	*

\* Less than 10% of net revenue

The Company's accounts receivable were concentrated with four customers at January 29, 2011 representing 13%, 12%, 12% and 11% of gross accounts receivable, respectively and were concentrated with three customers at January 30, 2010 representing 25%, 22% and 20% of gross accounts receivable, respectively.

In each of fiscal 2011, 2010 and 2009, no distributor accounted for more than 10% of the Company's net revenue. The Company continuously monitors the creditworthiness of its distributors and believes these distributors' sales to diverse end customers and to diverse geographies further serve to mitigate the Company's exposure to credit risk.

***Inventories***

Inventory is stated at the lower of cost or market. The Company records inventory excess and obsolescence provisions for estimated obsolete or unsellable inventory equal to the difference between the cost of inventory and estimated net realizable value based upon assumptions about future demand and market conditions. If actual future demand for the Company's products is less than currently forecasted, additional inventory provisions may be required. Once a provision is recorded, it is maintained until the product to which it relates to is sold or otherwise disposed of. For fiscal 2011, 2010 and 2009, the Company recorded fair market value adjustments



**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

related to inventory acquired in an acquisition and sold during the year of \$2.4 million, \$15.5 million and \$15.4 million, respectively. Shipping and handling costs are classified as a component of cost of goods sold in the consolidated statements of operations.

***Property and Equipment***

Property and equipment, including capital leases and leasehold improvements, are stated at cost less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which ranges from three to five years. Buildings are depreciated over an estimated useful life of 30 years and building improvements are depreciated over estimated useful lives of 15 years. Land is not depreciated. Assets held under capital leases and leasehold improvements are amortized over the shorter of term of the lease or their estimated useful lives.

***Goodwill***

Goodwill is recorded when the consideration paid for a business acquisition exceeds the fair value of net tangible and intangible assets acquired. Goodwill is measured and tested for impairment on an annual basis during the fourth fiscal quarter or more frequently if the Company believes indicators of impairment exist. The performance of the test involves a two-step process. The first step requires comparing the fair value of the reporting unit to its net book value, including goodwill. As the Company has only one reporting unit, the fair value of the reporting unit is determined by taking the market capitalization of the Company as determined through quoted market prices and adjusted for control premiums and other relevant factors. A potential impairment exists if the fair value of the reporting unit is lower than its net book value. The second step of the process is only performed if a potential impairment exists, and it involves determining the difference between the fair value of the reporting unit's net assets other than goodwill and the fair value of the reporting unit. If the difference is less than the net book value of goodwill, impairment exists and is recorded. In the event that the Company determines that the value of goodwill has become impaired, the Company will record an accounting charge for the amount of impairment during the fiscal quarter in which the determination is made. The Company has not been required to perform this second step of the process because the fair value of the reporting unit has significantly exceeded its net book value at every measurement date.

***Long-Lived Assets and Intangible Assets***

Long-lived assets include equipment, furniture and fixtures and intangible assets. Whenever events or changes in circumstances indicate that the carrying amount of long-lived assets may not be recoverable, the Company estimates the future cash flows, undiscounted and without interest charges, expected to result from the use of those assets and their eventual cash position. If the sum of the expected future cash flows is less than the carrying amount of those assets, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets. Please see Note 7 Goodwill and Acquired Intangible Assets for further details regarding impairment of acquisition-related identified intangible assets.

Acquisition-related identified intangible assets are amortized on a straight-line basis over their estimated economic lives of one to seven years for purchased technology, one to eight years for core technology, one to five years for trade name, four to seven years for customer contracts and three years for non-compete agreements.

***Foreign Currency Transactions***

The functional currency of all of the Company's non-United States operations is the United States dollar. Monetary accounts maintained in currencies other than the United States dollar are re-measured using the foreign

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

exchange rate at the balance sheet date. Operational accounts and nonmonetary balance sheet accounts are measured and recorded at the rate in effect at the date of the transaction. The effects of foreign currency re-measurement are reported in current operations.

***Revenue Recognition***

The Company recognizes revenues when there is persuasive evidence of an arrangement, delivery has occurred, the fee is fixed or determinable, and collection is reasonably assured.

Product revenue is generally recognized upon shipment of product to customers, net of accruals for estimated sales returns and rebates. However, some of the Company's sales are made through distributors under agreements allowing for price protection, shipped from stock pricing adjustment rights, and limited rights of return on products unsold by the distributors. Although title passes to the distributor upon shipment terms and payment by the Company's distributors is not contingent on resale of the product, product revenue on sales made through distributors with price protection, shipped from stock pricing adjustment rights and stock rotation rights are deferred until the distributors sell the product to end customers. Deferred revenue less the related cost of the inventories is reported as deferred income. The Company does not believe that there is any significant exposure related to impairment of deferred cost of sales, as its historical returns have been minimal and inventory turnover for its distributors generally ranges from 60 to 90 days. The Company's sales to direct customers are made primarily pursuant to standard purchase orders for delivery of products. Revenue related to the sale of consignment inventory is not recognized until the product is pulled from inventory stock by the customer.

The provision for estimated sales returns on product sales is recorded in the same period the related revenues are recorded. These estimates are based on historical returns, analysis of credit memo data and other known factors. Actual returns could differ from these estimates. The Company accounts for rebates by recording reductions to revenue for rebates in the same period that the related revenue is recorded. The amount of these reductions is based upon the terms included in the Company's various rebate agreements.

***Advertising Expense***

Advertising costs are expensed as incurred.

***Stock-Based Compensation***

Stock-based compensation is measured at the grant date, based on the fair value of the award, and is recognized as expense over the requisite service period. The Company amortizes stock-based compensation expense under the straight-line attribution method over the vest term which is generally four years for annual grants to employees and five years for new hire grants.

The fair value of restricted stock units is based on the fair market value of the Company's common stock on the date of grant. The Company estimates the fair value of stock option awards on the date of grant using the Black Scholes option-pricing model. The value of the portion of the awards that is ultimately expected to vest is recognized as expense over the requisite service periods. The Black-Scholes model incorporates various highly subjective assumptions including expected term of awards, expected future stock price volatility, and expected forfeiture rates.

In developing estimates used to calculate assumptions, the Company establishes the expected term for employee options, as well as expected forfeiture rates, based on the historical settlement experience and after giving consideration to vesting schedules. Assumptions for option exercises and pre-vesting terminations of

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

options were stratified by employee groups with sufficiently distinct behavior patterns. Expected volatility was developed based on the average of the Company's historical daily stock price volatility.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from initial estimates. Stock-based compensation expense is recorded net of estimated forfeitures such that expense is recorded only for those stock-based awards that are expected to vest. Previously recognized expense is reversed for the portion of awards forfeited prior to vesting as and when forfeitures occurred.

***Comprehensive Income (Loss)***

Comprehensive income (loss) is comprised of net income and unrealized gains and losses on available-for-sale securities and foreign exchange contracts. For fiscal 2011, 2010 and 2009, net unrealized gains (losses) were reclassified as realized gains (losses) and recognized in the accompanying statement of operations upon the sale of the related marketable investments and maturity of the related contracts of \$2.0 million, \$(0.2) million and \$(1.3) million, respectively.

Accumulated other comprehensive income (loss), as presented on the accompanying balance sheets, consists of net unrealized gains and losses on available-for-sale securities and foreign exchange contracts, net of tax.

***Net Income Per Share***

The Company reports both basic net income per share, which is based upon the weighted average number of common shares outstanding, and diluted net income per share, which is based on the weighted average number of common shares outstanding and potentially dilutive common shares.

***Accounting for Income Taxes***

In accordance with Accounting Standards Codification (ASC) Topic 740, Income Taxes (ASC 740), the Company recognizes income taxes using an asset and liability approach. This approach requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated.

Evaluating the need for an amount of a valuation allowance for deferred tax assets often requires judgment and analysis of all the positive and negative evidence available to determine whether all or some portion of the deferred tax assets will not be realized. A valuation allowance must be established for deferred tax assets when it is more likely than not that they will not be realized. Based on the available evidence and judgment, the Company has determined that it is more likely than not that research credits and certain acquired net operating losses will not be realized and therefore the Company has provided a full valuation allowance against these credits. It is not clear whether any of the research credits will ever be used, therefore, the Company has recorded a valuation allowance on the entire research credit carryforward. Accordingly, the Company has established a valuation allowance for such deferred tax assets. If there is a change in the Company's ability to realize its deferred tax assets, then the Company's tax provision may decrease in the period in which it determines that realization is more likely than not.

As a multinational corporation, the Company conducts its business in many countries and is subject to taxation in many jurisdictions. The taxation of the Company's business is subject to the application of various

## **Table of Contents**

### **MARVELL TECHNOLOGY GROUP LTD.**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

and sometimes conflicting tax laws and regulations as well as multinational tax conventions. The Company's effective tax rate is highly dependent upon the geographic distribution of its worldwide earnings or losses, the tax regulations and tax holidays in each geographic region, the availability of tax credits and carryforwards, and the effectiveness of its tax planning strategies. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation, and the evolution of regulations and court rulings. Consequently, taxing authorities may impose tax assessments or judgments against the Company that could materially impact its tax liability and/or its effective income tax rate.

The Company is subject to income tax audits by the respective tax authorities in all of the jurisdictions in which the Company operates. The Company recognizes the effect of income tax positions only if these positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is more than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest and penalties related to unrecognized tax benefits in income tax expense. The calculation of the Company's tax liabilities involves the inherent uncertainty associated with the application of U.S. GAAP and complex tax laws. The Company believes it has adequately provided in its financial statements for additional taxes that it estimates may be required to be paid as a result of such examinations. While the Company believes that it has adequately provided for all tax positions, amounts asserted by tax authorities could be greater or less than the Company's accrued position. These tax liabilities, including the interest and penalties, are released pursuant to a settlement with tax authorities, completion of audit or expiration of various statutes of limitation. The material jurisdictions in which the Company may be subject to potential examination by tax authorities throughout the world, include such major jurisdictions as China, Israel, Singapore, Switzerland and the United States.

#### ***Warranty***

The Company's products are generally subject to warranty, which provides for the estimated future costs of repair, replacement or customer accommodation upon shipment of the product. The Company's products typically carry a standard 90-day warranty, with certain exceptions in which the warranty period can range from one to five years based on contractual agreements. The warranty accrual is primarily estimated based on historical claims compared to historical revenues and assumes that the Company will have to replace products subject to a claim. For new products, the Company uses a historical percentage for the appropriate class of product. From time to time, the Company becomes aware of specific warranty situations, and it records specific accruals to cover these exposures.

#### ***Recent Accounting Pronouncements***

In September 2009, the Financial Accounting Standards Board (the "FASB") issued new accounting guidance related to the revenue recognition of multiple element arrangements. The new guidance states that if vendor specific objective evidence or third party evidence for deliverables in an arrangement cannot be determined, companies will be required to develop an estimate of the selling price to separate deliverables and allocate arrangement consideration using the relative selling price method. The accounting guidance was adopted during fiscal 2011, however, as the Company does not generally enter into multiple element arrangements, its adoption did not impact the Company's financial position or results of operations.

In December 2009, the FASB issued revised guidance that amends the consolidation rules related to variable interest entities by replacing the previous quantitative-based analysis with a framework that is based more on qualitative judgments. The determination of whether a company is required to consolidate an entity is based on, among other things, an entity's purpose and design, a company's ability to direct the activities of the entity that

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

most significantly impact the entity's economic performance and a company's obligation to absorb losses or a right to receive benefits that could potentially be significant to the variable interest entity. This guidance requires ongoing reassessments of whether an enterprise is the primary beneficiary of the variable interest entity. This guidance became effective during fiscal 2011 and its adoption did not have a material impact on the Company's financial position or results of operations.

In January 2010, the FASB issued guidance that expands the interim and annual disclosure requirements of fair value measurements, including the information about movement of assets between Level 1 and 2 of the three-tier fair value hierarchy established under its fair value measurement guidance. This guidance also requires separate disclosure for purchases, sales, issuances and settlements in the reconciliation for fair value measurements using significant unobservable inputs using Level 3 methodologies. Except for the detailed disclosure in the Level 3 reconciliation, which is effective for the fiscal years beginning after December 15, 2010, all the other disclosures under this guidance became effective during fiscal 2011. The adoption of this guidance did not have a material impact on the Company's financial position or results of operations.

**Note 2 Business Combinations:**

*Acquisitions in fiscal 2011*

In July 2010, the Company purchased the assets of a company engaged in the development of powerline communication for home networking and broadband over powerline applications. Under the purchase method of accounting, the total purchase price of \$20.7 million was allocated to tangible and intangible assets based on their fair values as of the date of the completion of the purchase. The Company recorded the purchase price allocation to tangible assets of \$0.3 million, amortizable intangible assets of \$7.8 million, in-process research and development (IPR&D) of \$9.7 million and goodwill of \$2.9 million.

In December 2010, the Company completed the acquisition of a mobile software consulting firm specializing in user interface application software. The purchase consideration was determined to be \$11.8 million and was allocated to intangible assets based on their fair values as of the date of the completion of the purchase under the purchase method of accounting. The Company recorded the purchase price allocation to amortizable intangible assets of \$7.5 million and goodwill of \$4.3 million. Additional consideration of \$9.3 million, which will be paid to employees, is contingent on continuing employment and therefore will be expensed as compensation during the next 3 years.

*Acquisition in prior years*

During fiscal 2009, the Company completed the acquisition of a company engaged in developing Gigabit Passive Optical Networks solutions for telecommunications equipment manufacturers and original device manufacturers. Under the purchase method of accounting, the total purchase price was allocated to net tangible and intangible assets based on their fair values as of the date of the completion of the acquisition. The Company recorded acquired net liabilities of \$1.4 million, amortizable intangible assets of \$6.2 million and goodwill of \$0.5 million. The intangible assets are being amortized over their useful lives.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 3 Investments:**

The following tables summarize the Company's investments (in thousands):

	Amortized Cost	As of January 29, 2011 Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>Short-term investments:</b>				
Available-for-sale:				
Corporate debt securities	\$ 648,278	\$ 3,208	\$ (213)	\$ 651,273
U.S. government and agencies	431,174	561	(52)	431,683
Total short-term investments	\$ 1,079,452	\$ 3,769	\$ (265)	\$ 1,082,956
<b>Long-term investments:</b>				
Available-for-sale:				
Auction rate securities	\$ 27,850	\$	\$ (1,624)	\$ 26,226
Total long-term investments	\$ 27,850	\$	\$ (1,624)	\$ 26,226
Total investments	\$ 1,107,302	\$ 3,769	\$ (1,889)	\$ 1,109,182

	Amortized Cost	As of January 30, 2010 Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>Short-term investments:</b>				
Available-for-sale:				
Corporate debt securities	\$ 227,610	\$ 934	\$ (75)	\$ 228,469
U.S. government and agencies	457,592	258	(30)	457,820
Trading securities:				
Auction rate security and settlement option	5,000			5,000
Total short-term investments	\$ 690,202	\$ 1,192	\$ (105)	\$ 691,289
<b>Long-term investments:</b>				
Available-for-sale:				
Auction rate securities	\$ 36,600	\$	\$ (2,319)	\$ 34,281
Total long-term investments	\$ 36,600	\$	\$ (2,319)	\$ 34,281
Total investments	\$ 726,802	\$ 1,192	\$ (2,424)	\$ 725,570

As of January 29, 2011, the Company's investment portfolio included \$27.9 million in par value of auction rate securities. Beginning in February 2008, liquidity issues in the global credit markets resulted in a failure of auction rate securities, as the amount of securities submitted for sale in those auctions exceeded the amount of bids. To estimate the fair value of the auction rate securities since that time, the Company used a discounted cash flow model based on estimated timing and amount of future interest and principal payments, credit quality of the underlying



## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

securities and liquidity considerations, the collateralization of underlying security investments, the credit worthiness of the issuer of the securities, the probability of full repayment and other considerations. As of January 29, 2011, the fair value of auction rate securities was \$1.6 million less than par value and was recorded in long-term investments.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Based on the Company's assessment of its cash flow projections, a balance of approximately \$2.9 billion in cash, cash equivalents and short-term investments other than auction rate securities and the fact that the Company continues to generate positive cash flow on a quarterly basis, the Company does not anticipate having to sell these securities below par value in order to operate its business. The Company does not have the intent to sell these auction rate securities until recovery. Thus, the Company considers the impairment to be temporary and recorded the unrealized loss to accumulated other comprehensive income (loss), a component of shareholders' equity.

The contractual maturities of available-for-sale and trading debt securities at January 29, 2011, and January 30, 2010 are presented in the following table (in thousands):

	January 29, 2011		January 30, 2010	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due in one year or less	\$ 560,190	\$ 560,999	\$ 357,179	\$ 357,348
Due between one and five years	519,262	521,957	333,023	333,941
Due over five years	27,850	26,226	36,600	34,281
	\$ 1,107,302	\$ 1,109,182	\$ 726,802	\$ 725,570

The following tables summarize the investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position (in thousands):

	Less than 12 months		January 29, 2011 12 months or more		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	\$ 113,081	\$ (213)	\$	\$	\$ 113,081	\$ (213)
U.S. Federal and State debt securities	91,962	(52)			91,962	(52)
Auction rate securities			26,226	(1,624)	26,226	(1,624)
Total securities	\$ 205,043	\$ (265)	\$ 26,226	\$ (1,624)	\$ 231,269	\$ (1,889)

	Less than 12 months		January 30, 2010 12 months or more		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	\$ 28,428	\$ (75)	\$	\$	\$ 28,428	\$ (75)
U.S. Federal and State debt securities	94,220	(30)			94,220	(30)
Auction rate securities	5,000		34,281	(2,319)	39,281	(2,319)
Total securities	\$ 127,648	\$ (105)	\$ 34,281	\$ (2,319)	\$ 161,929	\$ (2,424)



**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 4 Supplemental Financial Information (in thousands):*****Cash and cash equivalents***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Cash	\$ 340,236	\$ 310,756
Cash equivalents:		
Commercial paper	9,797	4,000
Time deposits	159,938	142,794
Money market mutual fund	1,230,616	542,574
Federal agency notes	106,487	105,304
<b>Total cash and cash equivalents</b>	<b>\$ 1,847,074</b>	<b>\$ 1,105,428</b>

***Inventories***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Work-in-process	\$ 156,108	\$ 128,371
Finished goods	89,340	113,170
<b>Inventories</b>	<b>\$ 245,448</b>	<b>\$ 241,541</b>

***Property and equipment, net***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Machinery and equipment	\$ 435,900	\$ 371,281
Computer software	74,966	66,643
Furniture and fixtures	23,498	23,335
Leasehold improvements	34,142	33,224
Buildings	144,596	146,294
Building improvements	41,200	45,631
Land	69,246	71,198
Construction in progress	8,469	5,174
	832,017	762,780
Less: Accumulated depreciation and amortization	(473,577)	(420,283)
<b>Property and equipment, net</b>	<b>\$ 358,440</b>	<b>\$ 342,497</b>

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

The Company recorded depreciation expense of \$72.2 million, \$87.3 million and \$95.5 million for fiscal 2011, 2010 and 2009, respectively. Property and equipment included \$7.0 million of an asset acquired under a capital lease at January 29, 2011, January 30, 2010 and January 31, 2009. Accumulated depreciation related to this asset was \$6.4 million, \$5.0 million and \$3.6 million at January 29, 2011, January 30, 2010 and January 31, 2009, respectively.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Other non-current assets***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Technology licenses	\$ 51,642	\$ 33,486
Deferred tax assets, non-current	27,671	34,638
Deferred compensation	6,169	
Long-term prepayments for foundry capacity	5,289	8,504
Severance fund	4,819	57,261
Equity investments in privately held companies	3,950	6,314
Other	11,840	11,651
<b>Other non-current assets</b>	<b>\$ 111,380</b>	<b>\$ 151,854</b>

During fiscal 2011, the Company sold a \$2.3 million investment in a privately held company for proceeds of \$10.2 million. The gain on the sale of \$7.9 million was recorded in interest and other income on the consolidated statement of operations. In addition to the initial proceeds, the purchase agreement contains earn-out provisions whereby additional gains could be recognized if the related operations meet specific operational targets during calendar year 2011. The Company has not recognized any gain for the potential earn out as of fiscal 2011.

For details related to the severance fund, please see Note 11 Benefit Plans .

***Accrued liabilities***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Accrued rebates	\$ 32,405	\$ 13,404
Accrued royalties	14,018	12,651
Accrued legal and professional services	10,676	13,585
Customer advances	3,515	8,167
Technology license obligation	4,850	4,000
Accrued sales/goods and services tax	3,679	6,082
Income tax payable		5,269
Other	16,340	18,221
<b>Accrued liabilities</b>	<b>\$ 85,483</b>	<b>\$ 81,379</b>

***Other long-term liabilities***

	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Accrued severance	\$ 3,226	\$ 53,549
Long-term facilities consolidation	3,271	3,305
Technology license obligation	19,218	4,500

# Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Long-term accrued employee compensation	9,258	3,075
Other	4,367	4,171
Other long-term liabilities	\$ 39,340	\$ 68,600

75

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Net income per share***

The computations of basic and diluted net income per share are presented in the following table (in thousands, except per share amounts):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
Numerator:			
Net income:	\$ 904,129	\$ 353,456	\$ 147,242
Denominator:			
Weighted average shares of common shares outstanding:			
Weighted average shares basic	648,347	623,934	608,747
Effect of dilutive securities:			
Warrants			315
Common share options and other	28,531	29,807	21,266
Weighted average shares diluted	676,878	653,741	630,328
Net income per share:			
Basic	\$ 1.39	\$ 0.57	\$ 0.24
Diluted	\$ 1.34	\$ 0.54	\$ 0.23

Options to purchase 12.2 million common shares at a weighted average exercise price of \$21.39 have been excluded from the computation of diluted net income per share for fiscal 2011 because including them would have been anti-dilutive.

Options to purchase 14.3 million common shares at a weighted average exercise price of \$13.28 have been excluded from the computation of diluted net income per share for fiscal 2010 because including them would have been anti-dilutive.

Options to purchase 64.5 million common shares at a weighted average exercise price of \$19.49 have been excluded from the computation of diluted net income per share for fiscal 2009 because including them would have been anti-dilutive.

***Comprehensive income (loss) (in thousands)***

The changes in the components of other comprehensive income were as follows (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
Net income	\$ 904,129	\$ 353,456	\$ 147,242
Other comprehensive income			
Change in unrealized gain on marketable securities	2,417	1,087	
Change in unrealized gain (loss) on auction rate securities	695	(1,010)	(1,333)
Change in unrealized gain (loss) on cash flow hedges	(1,134)	341	
Change in other	(1)	(585)	



Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Total comprehensive income	\$ 906,106	\$ 353,289	\$ 145,909
----------------------------	------------	------------	------------

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The components of accumulated other comprehensive income (loss) were as follows (in thousands):

	January 29, 2011	January 30, 2010
Unrealized gain on marketable securities	\$ 3,504	\$ 1,087
Unrealized loss on auction rate securities	(1,624)	(2,319)
Unrealized gain on cash flow hedges	(793)	341
Other	5	6
Accumulated other comprehensive income (loss)	\$ 1,092	\$ (885)

**Note 5 Derivative Financial Instruments:**

The Company manages some of its foreign currency exchange rate risk through the purchase of foreign currency exchange contracts that hedge against the short term impact of currency fluctuations. The Company's policy is to enter into foreign currency forward contracts with maturities generally less than 12 months that mitigate the impact of rate fluctuations on certain local currency denominated operating expenses. All derivatives are recorded at fair value in either prepaid expenses and other current assets or accrued liabilities. The Company reports cash flows from derivative instruments in cash flows from operating activities. The Company uses quoted prices to value its derivative instruments.

As of January 29, 2011, the notional amounts of outstanding forward contracts were as follows (in thousands):

	January 29, 2011		January 30, 2010	
	Buy Contracts	Sell Contracts	Buy Contracts	Sell Contracts
Israeli shekel	\$ 56,360	\$	\$ 29,512	\$ 1,163
Euro		3,698		
	\$ 56,360	\$ 3,698	\$ 29,512	\$ 1,163

**Cash Flow Hedges.** The Company designates and documents its foreign currency forward exchange contracts as cash flow hedges for certain operating expenses denominated in Israeli shekels. The Company evaluates and calculates the effectiveness of each hedge at least quarterly. The effective change is recorded in accumulated other comprehensive income and is subsequently reclassified to operating expense when the hedged expense is recognized. Ineffectiveness is recorded in interest and other income, net.

**Other Foreign Currency Forward Contracts.** The Company enters into foreign currency forward exchange contracts to hedge certain assets and liabilities denominated in various foreign currencies that it does not designate as hedges for accounting purposes. The maturities of these contracts are generally less than 12 months. Gains or losses arising from the remeasurement of these contracts to fair value each period are recorded in interest and other income, net.

The fair value and balance sheet classification of foreign exchange contract derivatives were not significant as of any period presented.

**Note 6 Fair Value Measurements:**

Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. As a basis for considering such assumptions, the guidance establishes a three-tier value

hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Level 2 Include other inputs that are directly or indirectly observable in the marketplace.

Level 3 Unobservable inputs that are supported by little or no market activity.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The Company measures its cash equivalents and marketable securities at fair value. The Company's cash equivalents and marketable securities are primarily classified within Level 1 with the exception of its investments in auction rate securities, which are classified within Level 3. Cash equivalents and marketable securities are valued primarily using quoted market prices utilizing market observable inputs. The Company's investments in corporate debt securities are classified within Level 2 as the market inputs to value these instruments consist of market yields, reported trades and broker/dealer quotes. In addition, foreign currency contracts are classified within Level 2 as the valuation inputs are based on quoted prices and market observable data of similar instruments. The Company's investments in auction rate securities are classified within Level 3 because there are no active markets for the auction rate securities and therefore the Company is unable to obtain independent valuations from market sources. Therefore, the auction rate securities were valued using a discounted cash flow model. Some of the inputs to the cash flow model are unobservable in the market. The total amount of assets measured using Level 3 valuation methodologies represented 0.4% of total assets as of January 29, 2011.

The table below sets forth, by level, the Company's financial assets that were accounted for at fair value as of January 29, 2011. The table does not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Level 1	Level 2	Level 3	Portion of Carrying Value Measured at Fair Value at January 29, 2011
<b>Items measured at fair value on a recurring basis:</b>				
Assets				
Cash equivalents:				
Money market funds	\$ 1,230,616	\$	\$	\$ 1,230,616
US government and agencies	106,487			106,487
Corporate debt securities		9,797		9,797
Time deposit	159,938			159,938
Short-term investments:				
US government and agencies	431,683			431,683
Corporate debt securities		651,273		651,273
Long-term investments:				
Auction rate securities			26,226	26,226
Prepaid expense and other current assets:				
Forward contracts		166		166
Other non-current assets:				
Severance pay fund	2,425	2,394		4,819
<b>Total assets</b>	<b>\$ 1,931,149</b>	<b>\$ 663,630</b>	<b>\$ 26,226</b>	<b>\$ 2,621,005</b>

Liabilities

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

### Accrued liabilities:

Forward contracts	\$	\$	804	\$	\$	804
-------------------	----	----	-----	----	----	-----

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	Level 1	Level 2	Level 3	Portion of Carrying Value Measured at Fair Value at January 30, 2010
<b>Items measured at fair value on a recurring basis:</b>				
Assets				
Cash equivalents:				
Money market funds	\$ 542,574	\$	\$	\$ 542,574
US government and agencies	105,304			105,304
Corporate debt securities		4,000		4,000
Time deposit	142,794			142,794
Short-term investments:				
US government and agencies	457,820			457,820
Corporate debt securities		228,469		228,469
Auction rate securities and settlement option			5,000	5,000
Long-term investments:				
Auction rate securities			34,281	34,281
Prepaid expense and other current assets:				
Forward contracts		830		830
Other non-current assets:				
Severance pay fund	9,156	48,105		57,261
Total assets	\$ 1,257,648	\$ 281,404	\$ 39,281	\$ 1,578,333

The following table summarizes the change in fair values for Level 3 items for the year ended January 29, 2011:

	Level 3
<b>Changes in fair value during the year ended January 29, 2011 (pre-tax):</b>	
Beginning balance at January 31, 2010	\$ 39,281
Purchases	
Sales and redemption	(13,616)
Realized loss on sale	(134)
Unrealized gain included in accumulated other comprehensive income (loss)	695
Ending balance at January 29, 2011	\$ 26,226

	Level 3
<b>Changes in fair value during the year ended January 30, 2010 (pre-tax):</b>	
Beginning balance at February 1, 2009	\$ 40,541
Purchases	
Sales and redemption	(250)
Unrealized loss included in accumulated other comprehensive income (loss)	(1,010)

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Ending balance at January 30, 2010

\$ 39,281

Assets measured and recorded at fair value on a non-recurring basis as of January 29, 2011 and January 30, 2010 were not significant and consisted primarily of assets held for sale.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 7 Goodwill and Acquired Intangible Assets:**

The Company performed an annual assessment of goodwill impairment at the beginning of its fourth quarter of fiscal 2011 and 2010 and, as a result, the Company concluded that no impairment was necessary.

The following table summarizes the activity related to the carrying value of goodwill (in thousands):

Balance at January 30, 2010	\$ 1,997,662
Additions due to business combinations	7,171
Balance at January 29, 2011	\$ 2,004,833

The carrying amounts of acquired intangible assets are as follows (in thousands):

	Range of Useful Lives	Gross Carrying Amounts	January 29, 2011 Accumulated Amortization and Write-Offs	Net Carrying Amount	Gross Carrying Amounts	January 30, 2010 Accumulated Amortization and Write-Offs	Net Carrying Amount
Purchased technology	1 -7 years	\$ 726,040	\$ (698,877)	\$ 27,163	\$ 714,640	\$ (665,010)	\$ 49,630
Core technology	1 -8 years	212,650	(155,359)	57,291	212,650	(129,478)	83,172
Trade name	1 -5 years	350	(299)	51	350	(259)	91
Customer contracts	4 -7 years	187,200	(156,774)	30,426	183,300	(137,163)	46,137
Non-compete agreements	3 years	700	(700)		700	(629)	71
In-process research and development	*	9,700		9,700			
Total intangible assets, net		\$ 1,136,640	\$ (1,012,009)	\$ 124,631	\$ 1,111,640	\$ (932,539)	\$ 179,101

\* Upon completion of the project, the related IPR&D assets will be amortized over its estimated useful life. If any of the projects are abandoned or the forecast of the project indicates that the fair value is less than the carrying amount, the Company will be required to impair the related IPR&D asset.

In fiscal 2011, the Company did not record any impairment of acquisition related intangible assets. In fiscal 2010, the Company wrote-off \$1.0 million of acquisition related intangible assets.

Based on the identified intangible assets recorded at January 29, 2011, the future amortization expense of identified intangibles excluding IPR&D for the next five fiscal years is as follows (in thousands):

Fiscal year 2012	\$ 46,231
------------------	-----------



Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

2013	39,497
2014	24,814
2015	3,414
2016	650
Thereafter	325
	\$ 114,931

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 8 Restructuring:**

During fiscal 2011, as a result of the anticipated sale of one of its facilities, the Company classified the carrying value of the building as held for sale within prepaid expenses and other current assets. This resulted in a charge of \$1.1 million to write-down the carrying value to fair value in research and development. In addition, the Company continued to make payments and incur on-going operating expenses from its reserved facilities. During fiscal 2011, the Company subleased one of its facilities and recorded an adjustment to the restructuring liabilities.

During fiscal 2010, the Company continued to implement certain cost reduction measures that included reductions in workforce that had been announced in the first quarter of fiscal 2010. In addition, the Company also restructured some facilities due to vacating certain locations. As a result, during fiscal 2010, Company recorded a restructuring charge of \$21.7 million consisting of \$8.6 million of severance and related employee benefits to terminated employees, facilities and related charges of \$3.9 million and equipment and other related charges of \$9.1 million.

During the fourth quarter of fiscal 2009, the Company implemented certain cost reduction measures that included reductions in workforce in all functions of the organization worldwide, impacting approximately 200 employees, in order to reduce the Company's cost structure. As a result, a restructuring charge of \$9.7 million was recorded that consisted of \$6.6 million of severance and related employee benefits to the terminated employees, \$2.7 million of charges related to the impairment of abandoned facilities and \$0.4 million of other equipment charges.

The following table sets forth an analysis of the components of the restructuring charges and the payments made for the years ended (in thousands):

	<b>January 29, 2011</b>	<b>Year Ended January 30, 2010</b>	<b>January 31, 2009</b>
Restructuring liabilities, beginning of period	\$ 5,397	\$ 7,685	\$ 2,731
Severance and related charges		8,640	6,576
Facilities and related charges	3,271	3,884	2,900
Equipment and other related charges	94	9,139	213
Non-cash adjustment	(1,272)	(4,882)	(120)
Net cash payments	(4,002)	(19,069)	(4,615)
Adjustments to previous assumptions	(182)		
Restructuring liabilities, end of period	\$ 3,306	\$ 5,397	\$ 7,685

The following table presents details of restructuring charges by functional line item (in thousands):

	<b>January 29, 2011</b>	<b>January 30, 2010</b>	<b>January 31, 2009</b>
Research and development	\$ 1,966	\$ 15,046	\$ 5,282
Selling and marketing		1,838	730
General and administrative	1,217	4,779	3,677
	\$ 3,183	\$ 21,663	\$ 9,689

The remaining restructuring liabilities will be paid out through fiscal 2018.



**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 9 Shareholders Equity:**

***Common and Preferred Stock***

As of January 29, 2011, the Company is authorized to issue 992,000,000 shares of \$0.002 par value common stock and 8,000,000 shares of \$0.002 par value preferred stock. The Company has the authority to issue undesignated preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption and liquidation preferences. As of January 29, 2011 and January 30, 2010, no shares of preferred stock were outstanding.

***1995 Stock Option Plan***

In April 1995, the Company adopted the 1995 Stock Option Plan (the "Option Plan"). The Option Plan, as amended, had 383.4 million common shares reserved for issuance thereunder as of January 29, 2011. Options granted under the Option Plan generally have a term of ten years and generally must be issued at prices equal to the fair market value of the stock on the date of grant. Incentive stock options granted to shareholders who own greater than 10% of the outstanding stock at the time of the grant may not have a term exceeding five years and these options must be issued at prices of at least 110% of the fair market value of the stock on the date of grant. The options generally vest 20% one year after the vesting commencement date, and the remaining shares vest one-sixtieth per month over the remaining 48 months. Options granted under the Option Plan subsequent to March 1, 2000 may only be exercised upon or after vesting.

In addition, the Company can also grant stock awards, which may be subject to vesting. Further, the Company can grant restricted stock unit awards. Restricted stock unit awards are denominated in shares of stock, but may be settled in cash or tradable shares of the Company's common shares upon vesting, as determined by the Company at the time of grant.

***1997 Directors Stock Option Plan***

In August 1997, the Company adopted the 1997 Directors Stock Option Plan (the "1997 Directors Plan"). Under the 1997 Directors Plan, an outside director was granted an option to purchase 30,000 common shares upon appointment to the Company's Board of Directors. These options vested 20% one year after the vesting commencement date and remaining shares vest one-sixtieth per month over the remaining 48 months. An outside director was also granted an option to purchase 6,000 common shares on the date of each annual meeting of the shareholders. These options vested one-twelfth per month over 12 months after the fourth anniversary of the vesting commencement date. Options granted under the 1997 Directors Plan could be exercised prior to vesting. The 1997 Directors Plan was terminated in October 2007.

***2007 Directors Stock Incentive Plan***

In October 2007, the Company adopted the 2007 Directors Stock Incentive Plan (the "2007 Directors Plan"). The 2007 Directors Plan had 750,000 common shares reserved for issuance thereunder as of January 29, 2011. Under the 2007 Directors Plan, an outside director is granted an option to purchase 50,000 common shares upon appointment to the Company's Board of Directors. These options vest one-third on the one year anniversary of the date of grant and one-third of the shares on each one-year anniversary thereafter. An outside director who has served on the Company's Board of Directors for the prior six months is also granted an option to purchase 12,000 common shares on the date of each annual meeting of the Company's shareholders. These options vest 100% on the earlier of the date of the next annual general meeting of shareholders or the one year anniversary of

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

the date of grant. Beginning in calendar year 2011, an outside director who has served on the Company's Board of Directors for the prior six months will be granted upon re-election by the shareholders at the annual general meeting an option to purchase 9,000 common shares immediately following each annual general meeting of shareholders. These options vest 100% on the earlier of the date of the next annual general meeting of shareholders or the one year anniversary of the date of grant. In addition, an outside director who has served on the Company's Board of Directors for the prior six months will also be granted a restricted stock unit award (the Annual RSU Award) that will cover a number of shares with an aggregate fair market value as reported on the NASDAQ Global Select Market equal to \$70,000 immediately following each annual general meeting of shareholders. The Annual RSU Award vests as to one-third (1/3<sup>rd</sup>) of the shares subject to the Annual RSU Award on each one-year anniversary of the vesting commencement date.

Under the Option Plan and the 2007 Directors' Plan, the Company may also grant restricted stock unit awards, which may be subject to vesting, and restricted stock unit awards, which are denominated in shares of stock, but may be settled in cash or tradable shares of the Company's common shares upon vesting, as determined by the Company at the time of grant.

***2000 Employee Stock Purchase Plan***

In June 2000, the Company adopted the 2000 Employee Stock Purchase Plan (the Purchase Plan), and on October 22, 2009, the Purchase Plan was amended and restated (the Restated Purchase Plan). Participants purchase the Company's stock using payroll deductions, which may not exceed 15% of their total cash compensation. The Restated Purchase Plan had 23.2 million common shares reserved for issuance thereunder as of January 29, 2011. Pursuant to the terms of the Restated Purchase Plan, the look-back period for the stock purchase price was changed from 24 months to six months. This change was effective for new participants who enroll in the Restated Purchase Plan in December 2009 and is applicable for each successive offering period thereafter. Offering and purchase periods will continue to begin on December 8 and June 8 of each year. New participants will be granted the right to purchase common shares at a price per share that is 85% of the lesser of the fair market value of the Company's common shares at the beginning or the end of each six-month period. The existing two-year offering periods will be phased out and any currently enrolled participant in a current 24-month offering period will continue in the current offering period until the earlier of the end of the offering period or in the event the current offering period is reset. A reset occurs if the fair market value of the Company's common shares on any purchase date is less than it was on the first day of the offering period. Currently enrolled participants were granted the right to purchase common shares at a price per share that is 85% of the lesser of the fair market value of the shares at (i) the participant's entry date into the two-year offering period or (ii) the end of each six-month purchase period within the offering period.

The Purchase Plan included a limitation on the number of shares that may be purchased in the event that the market price of the Company's common shares decreases by more than 25% from one purchase date to the next. In the event the share limitation is triggered, the number of shares an employee may purchase on the subsequent purchase date may not exceed 75% of the number the employee could have purchased at 85% of the market price on the earlier purchase date. This share limitation was triggered in connection with the June 2008 purchase period, which ended in December 2008. Pursuant to the terms of the Restated Purchase Plan this share limitation is no longer effective.

During fiscal 2011, a total of 10.9 million shares were issued under the Restated Purchase Plan at a weighted-average price of \$5.27. During fiscal 2010, a total of 7.3 million shares were issued under the Restated Purchase Plan at a weighted-average price of \$4.95. During fiscal 2009, a total of 3.9 million shares were issued under the Purchase Plan at a weighted-average price of \$8.45.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Option Plan and Stock Award Activity***

The following table summarizes the activity under the Option Plan, the 2007 Directors' Plan and other stock based arrangements (in thousands, except for per share amounts):

	<b>Options Outstanding</b>	<b>Weighted Average Exercise Price of Options</b>
Balance at February 2, 2008	109,158	\$ 14.64
Granted	25,067	\$ 9.35
Canceled/Forfeited	(39,598)	\$ 21.58
Expired		
Exercised or issued	(9,573)	\$ 6.04
Balance at January 31, 2009	85,054	\$ 10.81
Granted	1,819	\$ 13.85
Canceled/Forfeited	(3,726)	\$ 15.45
Expired		
Exercised or issued	(12,181)	\$ 7.12
Balance at January 30, 2010	70,966	\$ 11.28
Granted	2,018	\$ 20.17
Canceled/Forfeited	(2,700)	\$ 18.47
Expired		\$
Exercised or issued	(13,959)	\$ 8.45
Balance at January 29, 2011	56,325	\$ 11.96
Vested and expected to vest at January 29, 2011	55,157	\$ 11.97
Exercisable at January 29, 2011	39,166	\$ 11.87

Included in the preceding table are options for 918,000 common shares granted at exercise prices ranging between \$6.84 and \$17.66 that will become exercisable only upon the achievement of specified annual earnings per share targets or achievement of certain operating performance criteria through fiscal 2014.

The aggregate intrinsic value and weighted average remaining contractual term of options vested and expected to vest at January 29, 2011 was \$428.1 million and 5.0 years, respectively. The aggregate intrinsic value and weighted average remaining contractual term of options exercisable at January 29, 2011 was \$314.4 million and 4.0 years, respectively. The aggregate intrinsic value is calculated based on the Company's closing stock price for all in-the-money options as of January 28, 2011.

The unamortized compensation expense for stock options will be amortized on a straight-line basis and is expected to be recognized over a weighted-average period of 1.6 years.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Included in the following table is activity related to the non-vested portion of the restricted stock units as follows (in thousands, except for prices):

	<b>Restricted Stock Outstanding</b>	<b>Weighted Average Grant Date Fair Value</b>
Balance at February 2, 2008	2,111	\$ 16.89
Granted	5,859	\$ 8.71
Vested	(1,135)	\$ 15.97
Canceled/Forfeited	(336)	\$ 13.59
Balance at January 31, 2009	6,499	\$ 9.58
Granted	78	\$ 13.49
Vested	(3,376)	\$ 10.20
Canceled/Forfeited	(455)	\$ 6.50
Balance at January 30, 2010	2,746	\$ 8.99
Granted	4,718	\$ 20.76
Vested	(1,619)	\$ 9.13
Canceled/Forfeited	(359)	\$ 13.87
Balance at January 29, 2011	5,486	\$ 18.75

Included in the preceding table are 557,000 restricted stock units that will become exercisable only upon the achievement of certain revenue growth and/or operating performance criteria through fiscal 2012.

The aggregate intrinsic value of restricted stock units expected to vest as of January 29, 2011 was \$94.1 million. The number of restricted stock units that are expected to vest is 4.9 million shares. As of January 29, 2011, compensation costs related to non-vested awards not yet recognized amounted to \$138.0 million. The unamortized compensation expense for restricted stock units will be amortized on a straight-line basis and is expected to be recognized over a weighted-average period of 1.4 years. Historically, the Company issued new shares to satisfy option exercises.

The total intrinsic value of stock options exercised during fiscal 2011, 2010 and 2009 was \$162.9 million, \$124.5 million and \$65.7 million, respectively.

**Stock-Based Compensation**

Total stock compensation expense for fiscal 2011, 2010, and 2009 are represented by expense categories in the table below (in thousands):

	<b>January 29, 2011</b>	<b>Year Ended January 30, 2010</b>	<b>January 31, 2009</b>
Cost of goods sold	\$ 7,522	\$ 10,690	\$ 11,644
Research and development	82,524	89,766	126,895
Selling and marketing	11,769	15,298	25,081

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

General and administrative	16,590	10,845	13,512
	\$ 118,405	\$ 126,599	\$ 177,132



**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Stock-based compensation of \$1.5 million, \$1.6 million and \$3.6 million was capitalized in inventory as of January 29, 2011, January 30, 2010 and January 31, 2009, respectively.

The following weighted average assumptions were used to calculate the Black-Scholes values for each type of stock instrument:

	Stock Option Plans Year Ended				ESPP Year Ended	
	January 29, 2011	January 30, 2010	January 31, 2009	January 29, 2011	January 30, 2010	January 31, 2009
Estimated fair value	\$ 9.33	\$ 6.32	\$ 4.01	\$ 5.91	\$ 4.34	\$ 5.39
Volatility	53%	53%	44%	53%	51%	45%
Expected term (in years)	4.7	4.6	5.2	0.5	1.1	1.3
Risk-free interest rate	2.2%	2.1%	3.1%	0.2%	0.6%	1.8%
Dividend yield						

In December 2008, the Company filed a tender offer option exchange program under which outstanding employee stock options (other than options held by executive officers) with exercise prices of \$12.00 or greater per share could be exchanged for a specified number of restricted stock units based on a predetermined exchange ratio granted with a new vesting period. If the number of restricted stock units to be granted was less than 150 shares, then employees received cash instead of restricted stock units. On January 23, 2009, the Company accepted for cancellation options to purchase 31.1 million common shares and in exchange granted to eligible employees restricted stock units to purchase 3.4 million shares of the Company's common shares. As a result of the exchange, the Company recorded stock-based compensation expense of \$5.1 million in fiscal 2009 under the provisions of stock-based compensation authoritative literature, primarily related to employees who received cash in lieu of replacement restricted stock units.

As a result of the Company's acquisitions, the Company assumed stock options previously granted by the acquired companies. As of January 29, 2011, a total of 134,712 common shares were reserved for issuance upon exercise of outstanding options assumed from the acquisitions. The related options are included in the preceding tables. The options vest over four to five years and have eight to ten year terms.

**Stock Repurchase Program**

In August 2010, the Company announced that its Board of Directors had authorized a stock repurchase program of up to \$500 million of the Company's common shares in open market, privately negotiated or block transactions. The Company repurchased 4.9 million shares for \$87.5 million in cash in fiscal 2011. The repurchased shares were retired immediately after the repurchases were completed. As of January 29, 2011, \$412.5 million remained available under this stock repurchase program.

In March 2011, the Company announced that its Board of Directors has authorized the Company to repurchase up to an additional \$500 million, for a total of \$1 billion, of its outstanding common shares. The repurchase program will be subject to market conditions and other factors and does not obligate the Company to repurchase any dollar amount or number of its common shares. The program may be extended, modified, suspended or discontinued at any time. The repurchases, which are expected to be funded from the Company's current cash and short-term investments position of over \$2.9 billion, may occur in open market, privately negotiated or block transactions.

Subsequent to the Company's fiscal year end and through March 24, 2011, the Company repurchased additional shares for \$497 million, bringing its total repurchases under its repurchase program to \$584 million.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 10 Income Taxes:**

The U.S. and non-U.S. components of income before income taxes consist of the following (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
U.S. operations	\$ 22,647	\$ 12,714	\$ 13,783
Non-U.S. operations	887,815	330,396	157,050
	\$ 910,462	\$ 343,110	\$ 170,833

The provision for income taxes consists of the following (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
Current income tax expense (benefit):			
Federal	\$ 1,111	\$ (35,778)	\$ 4,231
State	49	576	1,606
Foreign	3,282	11,500	35,222
Total current income tax expense	4,442	(23,702)	41,059
Deferred income tax expense (benefit):			
Federal	7,025	(254)	3,793
State	3,037	(556)	(523)
Foreign	(8,171)	14,166	(20,738)
Total deferred income tax expense (benefit)	1,891	13,356	(17,468)
Total provision (benefit) for income taxes	\$ 6,333	\$ (10,346)	\$ 23,591

Deferred tax assets (liabilities) consist of the following (in thousands):

	January 29, 2011	January 30, 2010
Deferred tax assets:		
Federal and California research and other tax credits	\$ 225,695	\$ 195,156
Reserves and accruals	29,718	26,895
Stock compensation	2,880	2,905
Net operating losses	19,643	19,738

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Gross deferred tax assets	277,936	244,694
Valuation allowance	(224,853)	(197,710)
Total deferred tax assets	53,083	46,984
Total deferred tax liabilities	(14,595)	(4,381)
Net deferred tax assets	\$ 38,488	\$ 42,603

The non-current portion of the deferred tax assets as of January 29, 2011 and January 30, 2010 was \$27.7 million and \$34.6 million, respectively, and is included with the other non-current assets.

As of January 29, 2011, the Company had net operating loss carryforwards available to offset future taxable income of approximately \$97.5 million, \$3.1 million and \$4.1 million for foreign, U.S. federal and state of California purposes, respectively. The federal carryforwards will expire in various fiscal years between 2021 and

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

2031, and the California carryforwards will expire at various fiscal years between 2014 and 2021, if not utilized before these years. The losses in non-U.S. components can be carried forward indefinitely. The Company had, for U.S. federal income tax return purposes, research tax credit carryforwards of approximately \$153.4 million that expire through fiscal 2031. As of January 29, 2011, the Company had unused California research and tax credit carryforwards of approximately \$146.2 million which can be carryforward indefinitely. Included in the U.S. federal and California carryforward amounts are \$42.3 million and \$44.4 million, respectively, that are attributable to excess tax benefits from stock options. Upon realization, the benefit associated with these credits will increase additional paid-in capital. The Company also has unused research tax credits and investment tax credit carryforwards of approximately \$12.5 million in other states that expire through fiscal 2026.

During fiscal 2011, the Company generated research credits for federal and other states far in excess of its current year tax liabilities. Based on the available objective positive and negative evidence, the Company has determined that it is more likely than not the federal and California research credits and certain acquired net operating losses will not be realized and therefore the Company has provided a full valuation allowance against these credits. It is not clear whether any of the research credit carryforward of \$299.6 million will ever be used, therefore, the Company has recorded a valuation allowance on the entire research credit carryforward. The Company increased the net valuation allowance by \$27.1 million from fiscal 2010, of which \$30.6 million is related to an increase in research credits and \$3.5 million is related to a decrease in foreign net operating loss. During fiscal 2011, deferred tax assets, net of a corresponding valuation allowance decreased \$4.1 million from the end of fiscal 2010, of which \$0.1 million relates to a net decrease in foreign net operating losses and the remaining balance of \$4.0 million relates to changes other deferred tax assets.

Reconciliation of the statutory federal income tax to the Company's effective tax:

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
Provision at U.S. notional statutory rate	35.0%	35.0%	35.0%
Non-deductible stock-based compensation	5.6	13.3	36.9
Difference in U.S. and non-U.S. tax rates	(40.0)	(41.2)	(59.8)
Generation of general business credits	(3.7)	(20.3)	(15.4)
Valuation allowance	3.4	18.4	13.9
Reserve	0.0	(9.2)	
Other	0.4	1.0	3.2
Effective tax rate	0.7%	(3.0)%	13.8%

The following table reflects changes in the unrecognized tax benefits (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
Unrecognized tax benefits as the beginning of the period	\$ 103,334	\$ 115,295	\$ 109,819
Increases related to prior year tax positions	494		3,733
Decreases related to prior year tax positions	(149)	(3,226)	
Increases related to current year tax positions	1,317	9,970	16,997
Settlements		(2,191)	
Lapse in the statute of limitations	(10,293)	(22,682)	(1,407)
Foreign exchange (gain) loss	7,909	6,168	(13,847)

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Gross amounts of unrecognized tax benefits as of the end of the period	\$ 102,612	\$ 103,334	\$ 115,295
--	------------	------------	------------

## **Table of Contents**

### **MARVELL TECHNOLOGY GROUP LTD.**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Included in the balances as of January 29, 2011 is \$86.7 million of unrecognized tax benefit that would affect the effective income tax rate if recognized.

The amount of interest and penalties accrued as of January 29, 2011 was approximately \$25.9 million and \$7.5 million, respectively, as of January 30, 2010, approximately \$22.2 million and \$7.7 million, respectively, and as of January 31, 2009, approximately \$22.6 million and \$10.8 million, respectively.

The Company is subject to income tax audits by the respective tax authorities in all of the jurisdictions in which it operates. The examination of tax liabilities in each of these jurisdictions requires the interpretation and application of complex and sometimes uncertain tax laws and regulations. As of January 29, 2011, the material jurisdictions that are subject to examination include China, Israel, Singapore, Switzerland and the United States for the Company's fiscal years 2003 through 2011. As of January 29, 2011, two of the Company's non-U.S. entities are under examination, one for fiscal year 2008 and the other for fiscal years 2006 through 2010.

During fiscal 2012, the Company will continue to review its tax positions and provide for or reverse unrecognized tax benefits as issues arise. At this time, the Company expects a decrease of \$14.4 million of unrecognized tax benefits during fiscal 2012 due to the expiration of the statute of limitations over the next 12 months.

The Economic Development Board of Singapore granted Pioneer Status to the Company's wholly-owned subsidiary in Singapore in July 1999. This tax exemption was to expire after ten years, but the Economic Development Board in June 2006 agreed to extend the term to 15 years. Fiscal 2011 and 2010 tax savings associated with this tax holiday were approximately \$7.9 million and \$5.8 million, respectively, which if paid would impact the Company's earnings per share results \$0.01 and \$0.01 per share, respectively. As a result, the Company anticipates that a significant portion of the income it earns in Singapore during this period will be exempt from the Singapore income tax. The Company is required to meet several requirements as to investment, headcount and activities in Singapore to retain this status.

Under the Israeli Encouragement law of approved or benefited enterprise, two branches of Marvell Israel ( MISL ), the GTL branch and the cellular branch (formerly Marvell DSPC), are entitled to a beneficial tax program that includes reduced tax rates and exemption of certain income. The first program was approved for MISL in 1995 and the most recent was approved in 2003. Marvell DSPC has five approved programs with the first approved in 1990 and the most recent approved in 2010. The benefit period is generally 10 to 15 years and begins in the first year in which the Company's Israeli divisions earn taxable income from the approved or benefited enterprises, provided the maximum period has not elapsed. Income from the approved or benefited enterprises is subject to reduced tax rates ranging between 0% and 10% or tax exemptions for fiscal years 2008 through 2020. For fiscal 2011 and fiscal 2010, the benefit associated with these approved enterprise programs was \$18.4 million and \$18.0 million, which provided earnings per share benefit of \$0.03 and \$0.03, respectively.

During fiscal 2007, the Swiss Federal Department of Economy and the Vaud Cantonal Tax Administration each granted Marvell Switzerland Sarl a total of a ten year tax holiday commencing with its fiscal year beginning January 29, 2006. The fiscal 2011 and 2010 tax savings associated with this tax holiday is approximately \$4.5 million and \$3.7 million, respectively, which provided an earnings per share benefit of less than \$0.01 for both years.

#### **Note 11 Benefit Plans:**

The Company sponsors a 401(k) savings and investment plan that allows eligible U.S. employees to participate by making pre-tax contributions to the 401(k) plan ranging from 1% to 80% of eligible earnings subject to a required annual limit. The Company may make discretionary contributions to the 401(k) plan upon approval by the Board of Directors. In fiscal 2005, the Board of Directors approved a resolution to allow the

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Company to provide an employer match to the 401(k) plan. During fiscal 2011, the Company increased the employer match, which is currently made 100% of the employee contribution up to \$500 per eligible employee on a quarterly basis. The participant must be employed by the Company on the last day of the calendar quarter to qualify for the match. At the end of the calendar year, the eligible employees receive a true-up match equal to the accumulated employee contribution for the calendar year up to \$2,000. The Company made matching contributions to employees of \$4.5 million, \$2.1 million and \$2.1 million during fiscal 2011, 2010 and 2009, respectively. As of January 29, 2011, the 401(k) plan offers a variety of investment alternatives, representing different asset classes. Employees may not invest in the Company's common shares through the 401(k) plan.

In connection with Israeli law, the Company is required to have a severance plan for its employees. The Company's severance pay liability is calculated based on the salary of each employee multiplied by the years of such employee's employment, and is reflected in the Company's balance sheet in other long-term liabilities on an accrual basis. In addition, the Company has assets comprised of insurance policies in the name of employees and other investments maintained in a central fund to generally fund the severance liability. The surrender value of the insurance policies is recorded in other noncurrent assets.

In fiscal 2011, the Company offered employees the option to convert their severance plan to a defined contribution plan, whereby funds equal to the severance pay liability as of the conversion date were transferred directly into the employees' accounts. A substantial majority of Israeli employees accepted the conversion option, and approximately \$55 million was transferred to individual employee accounts. Therefore, the Company no longer recognizes liabilities or the corresponding assets related to employees who accepted the conversion options. The severance pay balances were as follows (in thousands):

	<b>Year Ended</b>	
	<b>January 29, 2011</b>	<b>January 30, 2010</b>
Accrued severance	\$ 2,475	\$ 52,905
Less: Severance assets	(4,819)	(57,261)
Funded portion, net accrued severance pay	\$ (2,344)	\$ (4,356)

The severance pay expenses for fiscal 2011, 2010, and 2009 were \$9.3 million, \$7.4 million and \$10.6 million, respectively.

**Note 12 Commitments and Contingencies:*****Warranty Obligations***

The Company's products typically carry a standard 90 day warranty with certain exceptions in which the warranty period can range from one to five years based on contractual agreements. The following table presents changes in the warranty accrual included in accrued liabilities in the Company's Consolidated Balance Sheets (in thousands):

	<b>January 29, 2011</b>	<b>Year Ended January 30, 2010</b>	<b>January 31, 2009</b>
Beginning balance	\$ 1,965	\$ 2,093	\$ 2,532
Warranty expense	2,291	3,108	876
Payments and other charges	(1,817)	(3,236)	(1,315)

Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Ending balance	\$ 2,439	\$ 1,965	\$ 2,093
----------------	----------	----------	----------



**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Lease Commitments***

The Company leases some of its facilities under non-cancelable operating leases and leases certain property and equipment under capital leases. Future minimum lease payments, net of estimated sublease income under the operating and capital leases as of January 29, 2011, are presented in the following table (in thousands):

<b>Fiscal Year:</b>	<b>Operating Leases</b>	<b>Estimated Sublease Income</b>	<b>Net Operating Leases</b>	<b>Capital Leases</b>
2012	\$ 63,211	\$ (336)	\$ 62,875	\$ 521
2013	58,377	(281)	58,096	
2014	22,642	(143)	22,499	
2015	15,426		15,426	
2016	7,337		7,337	
Thereafter	6,018		6,018	
Total future minimum lease payments	\$ 173,011	\$ (760)	\$ 172,251	\$ 521
Less: amount representing interest				(10)
Present value of future minimum lease payments				511
Less: current portion of lease obligations				(511)
Long-term lease obligations				\$

Rent expense, net of sublease income on the operating leases for fiscal 2011, 2010, and 2009 was approximately \$17.1 million, \$18.5 million and \$21.1 million, respectively.

Included in operating lease commitments are lease payments for computer aided design software license agreements and airplane lease commitments.

***Purchase Commitments***

Under the Company's manufacturing relationships with its foundry partners, cancellation of all outstanding purchase orders are allowed but require repayment of all expenses incurred through the date of cancellation. As of January 29, 2011, these foundries had incurred approximately \$256.8 million of manufacturing expenses on the Company's outstanding purchase orders.

***Intellectual Property Indemnification***

The Company has agreed to indemnify certain customers for claims made against the Company's products, where such claims allege infringement of third party intellectual property rights, including, but not limited to, patents, registered trademarks, and/or copyrights. Under the aforementioned indemnification clauses, the Company may be obligated to defend the customer and pay for the damages awarded against the customer under an infringement claim as well as the customer's attorneys' fees and costs. The Company's indemnification obligations generally do not expire after termination or expiration of the agreement containing the indemnification obligation. In certain cases, there are limits on and exceptions to the Company's potential liability for indemnification. Although historically the Company has not made significant payments under these indemnification obligations, the Company cannot estimate the amount of potential future payments, if any, that it might be required to make as a result of these agreements. The maximum potential amount of any future payments that the Company could be required to make under

these indemnification obligations could be significant.

## Table of Contents

### MARVELL TECHNOLOGY GROUP LTD.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

##### *Contingencies*

*IPO Securities Litigation.* In 2001, two putative class action lawsuits were filed in the United States District Court for the Southern District of New York concerning certain alleged underwriting practices related to the Company's initial public offering (the "IPO") on June 29, 2000. The actions were consolidated and a consolidated complaint was filed, naming as defendants certain investment banks that participated in the IPO, the Company, and two of its officers, one of whom is also a director. Plaintiffs claim that defendants violated certain provisions of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), by allegedly failing to disclose that the underwriters received excessive and undisclosed commissions and entered into unlawful tie-in agreements with certain of their clients. The consolidated complaint seeks unspecified damages, interest and fees. In addition, this case has been coordinated with hundreds of other lawsuits filed by plaintiffs against underwriters and issuers for approximately 300 other IPOs. Defendants in the coordinated proceedings moved to dismiss the actions. In February 2003, the trial court granted the motions in part and denied them in part, allowing certain claims to proceed.

The parties have reached a global settlement of the coordinated litigation. Under the settlement, the insurers will pay the full amount of settlement share allocated to the Company, and the Company will bear no financial liability. The Company and other defendants will receive complete dismissals from the case. On October 5, 2009, the Court issued an order of final approval of the settlement. Certain objectors have filed appeals, and plaintiffs have filed motions to dismiss the appeals. If for any reason the settlement does not become effective, the Company believes it has meritorious defenses to the claims against it and intends to defend the action vigorously.

*Section 16(b) Litigation.* On October 9, 2007, a purported shareholder of the Company filed a complaint for violation of Section 16(b) of the Exchange Act, which prohibits short swing trading, against the Company's IPO underwriters. The complaint *Vanessa Simmonds v. The Goldman Sachs Group, et al.*, Case No. C07-1632 filed in District Court for the Western District of Washington, seeks the recovery of short swing profits. The Company is named as a nominal defendant only, and no recovery is sought from the Company. In March 2009, the district court granted a motion to dismiss filed by the underwriter defendants, which caused the case against the Company to be dismissed. The plaintiff appealed to the U.S. Court of Appeals for the Ninth Circuit, and in December 2010, the Ninth Circuit reversed the dismissal and remanded to the district court. On January 25, 2011, the Ninth Circuit entered an Order staying the mandate pending the filing of petitions for writ of certiorari in the United States Supreme Court by the underwriter defendants. No petition for a writ of certiorari has yet been filed, and no discovery has taken place.

*Jasmine Networks Litigation.* On September 12, 2001, Jasmine Networks, Inc. ("Jasmine") filed a lawsuit in the Santa Clara County Superior Court alleging claims against Marvell Semiconductor, Inc. ("MSI") and three of its officers for allegedly improperly obtaining and using information and technologies during the course of the negotiations with its personnel regarding the potential acquisition of certain Jasmine assets by MSI.

The case proceeded to trial on September 20, 2010. On November 24, 2010, a Santa Clara County jury returned a verdict in favor of MSI on all allegations. On January 7, 2011, the Court entered judgment in MSI's favor. Pursuant to California Civil Procedure provisions, Jasmine filed motions for a new trial and for a judgment notwithstanding the verdict. These motions were heard by the Court on February 25, 2011 and, later denied in written orders, Jasmine filed a notice of appeal in March 2011 and MSI intends to contest any such appeal vigorously. The Company does not believe, based on currently available facts and circumstances that it is reasonably possible to predict the final outcome of this case and, as such, the Company has not accrued for any amount as of January 29, 2011.

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Wage and Hour Class Action.* On October 18, 2006, Dan Holton ( Holton ), a former employee of MSI, filed a civil complaint in Santa Clara County Superior Court. Holton alleges that MSI misclassified him as an exempt employee. Holton claims that due to its misclassification MSI owes him unpaid wages for overtime, penalties for missed meal periods, and various other penalties under the California Labor Code, as well as interest. Holton also pursues a cause of action for unfair business practices under the California Business & Profession Code. Holton brought his complaint as a class action. On July 8, 2009, the Court granted certification of the following class: All Individual Contributor Engineers who held the title of PCB Designer, Associate Engineer, Engineer, Staff Engineer and Senior Engineers, who at any time during the class period while holding these positions did not have a degree above a baccalaureate degree nor a degree above a baccalaureate degree in a field of science related to the work performed, and worked for MSI in California, at any time from October 19, 2002 through the present. MSI disputes all of plaintiff's class claims, and intends to defend this matter vigorously. The matter has been set for trial on September 26, 2011.

*CSIRO Litigation.* On May 4, 2007, MSI, Marvell Asia Pte., Ltd. ( MAPL ), and Marvell International Ltd. ( MIL ) (collectively, the Company's Subsidiaries) filed an action in the United States District Court for the Eastern District of Texas seeking a declaratory judgment against Australia's Commonwealth Scientific and Industrial Research Organisation ( CSIRO ) that CSIRO's U.S. Patent No. 5,487,069 (the 069 Patent) is invalid and unenforceable and that the Company's Subsidiaries and the Company's customers do not infringe the 069 Patent.

The parties entered into a final settlement on August 19, 2010 and final dismissal was entered by the court on August 26, 2010. The resolution did not have a significant impact on the Company's financial statements.

*Wi-LAN Litigation.* On October 31, 2007, Wi-LAN, Inc. ( Wi-LAN ) sued two groups of system and chip manufacturers in the United States District Court for the Eastern District of Texas, in both cases naming MSI as a defendant and alleging patent infringement of U.S. Patent Nos. 5,282,222 and RE 37,802 that allegedly relate to the 802.11 wireless standards.

On February 3, 2009, the Court granted Wi-LAN's motion to add an additional patent, U.S. Patent No. 6,549,759, which purportedly relates to Bluetooth technology.

On June 4, 2010, Wi-LAN filed another patent litigation against MSI and other system and chip manufacturers in the United States District Court for the Eastern District of Texas. Wi-LAN asserted infringement of U.S. Patent No. 5,515,369, which also allegedly relates to Bluetooth technology.

MSI and Wi-LAN entered into a final settlement on February 24, 2011 and final dismissal was entered by the court on March 10, 2011. The resolution did not have a significant impact on the Company's financial statements.

*Carnegie Mellon Litigation.* On March 6, 2009, Carnegie Mellon University ( CMU ) filed a complaint in the United States District Court for the Western District of Pennsylvania naming MSI and the Company as defendants and alleging patent infringement. CMU has asserted two patents (U.S. Patent Nos. 6,201,839 and 6,438,180) purportedly relating to read-channel integrated circuit devices and the hard disk drive products incorporating such devices. The complaint seeks unspecified damages and an injunction. On June 1, 2009, MSI and the Company filed their answers and MSI filed counterclaims to the complaint seeking declaratory judgments of non-infringement and invalidity as to both of the asserted patents. The claim construction hearing was held on April 12 and 13, 2010, and a ruling was issued on October 1, 2010. On April 29, 2010, MSI and the Company filed their amended answers and counterclaims. The Company and MSI filed a motion for partial

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

summary judgment of invalidity on December 22, 2010, and the Court is scheduled to hear the matter on March 31, 2011. The Court has not yet scheduled a trial date. MSI and the Company believe that they do not infringe any valid and enforceable claims of the asserted CMU patents and intend to contest this action vigorously.

*PACid Patent Litigation.* On March 30, 2009, The PACid Group, LLC filed a complaint in the United States District Court for the Eastern District of Texas, case no. 6:09-cv-00143 LED, which named MSI, Marvell Technology, Inc. ( MTI ), Marvell Semiconductor, Ltd. ( MSL ), the Company and 15 other companies as defendants. The complaint alleged infringement of two patents purportedly relating to encryption: U.S. Patent Nos. 5,963,646 and 6,049,612. The complaint seeks unspecified damages and an injunction. On May 22, 2009, MSI filed its answer and counterclaims to the complaint. On June 1, 2009, MTI, MSL and the Company were dismissed without prejudice. The claim construction hearing was held on March 25, 2010, and a ruling was issued on July 15, 2010. The parties have resolved the dispute and a final dismissal was entered by the court on October 5, 2010. The resolution did not have a significant impact on the Company's financial statements.

*Xpoint Patent Litigation.* On August 21, 2009, Xpoint Technologies, Inc. filed a complaint in the United States District of Delaware, which names the Company, MSI and thirty-six other companies as defendants. The complaint alleged infringement of U.S. Patent No. 5,913,028 which purportedly relates to data traffic delivery. The complaint seeks unspecified damages and an injunction. A first amended complaint was filed on September 18, 2009 and a second amended complaint was filed on August 20, 2010. On October 28, 2009, the Company was dismissed from the lawsuit, although MSI remains a defendant. MSI filed its answers and counterclaims on December 18, 2009. The Court has scheduled a claim construction hearing for January 13, 2012, and trial for May 7, 2012. MSI intends to contest this action vigorously.

*Intravidual Patent Litigation.* On March 15, 2010, Intravidual, Inc. filed a Complaint in the United States District Court in the Eastern District of Texas. The Complaint names MSI and eight other Defendants, and alleges infringement of United States Patent No. 6,614,845 (the 845 patent ). The 845 patent is purportedly directed to a method and apparatus for differential macroblock encoding in video coders and decoders. The Complaint seeks unspecified damages and a permanent injunction. MSI filed its answer and counterclaims on May 10, 2010. On June 1, 2010, Intravidual filed an Amended Complaint in the case, naming several additional defendants including the Company. On June 18, 2010, MSI filed its answer to the amended complaint. On December 2, 2010, MSI and Intravidual finalized a settlement agreement, which did not have a significant impact on the Company's financial statements. A final dismissal was entered by the court on December 6, 2010.

*USEI Litigation.* On October 9, 2009, U.S. Ethernet Innovations, LLC ( USEI ) filed a complaint in the Eastern District of Texas, in which USEI has accused a number of system manufacturers, including the Company's customers, of patent infringement (the USEI litigation ). Specifically, USEI has asserted that these customers infringe U.S. Patent Nos. 5,307,459, 5,434,872, 5,732,094, and 5,299,313 (collectively, the USEI patents in suit ), which purportedly relate to Ethernet technologies. The complaint seeks unspecified damages and an injunction.

On May 4, 2010, MSI filed a motion to intervene in the USEI litigation, which was granted on May 19, 2010. On July 13, 2010, the Court issued an order granting the Defendants' motion to transfer the action to the Northern District of California; the case was formally transferred on August 23, 2010. A technology tutorial hearing is set for February 25, 2010. The Court has not yet set dates for a claim construction hearing or for trial. MSI believes that it does not infringe any valid and enforceable claim of the USEI patents in suit, and intends to litigate this action vigorously.

*Lake Cherokee Patent Litigation.* On June 30, 2010, Lake Cherokee Hard Drive Technologies, L.L.C. filed a complaint in the United States District Court in the Eastern District of Texas. The complaint names MSI

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

and seven other defendants, and alleges infringement of United States Patent Nos. 5,844,738 and 5,978,162 (collectively, the Lake Cherokee patents in suit). The Lake Cherokee patents in suit are purportedly relating to read-channel integrated circuit devices, and allegedly, to certain unspecified hard disk drive products incorporating such devices. The complaint seeks unspecified damages and a permanent injunction. The initial scheduling conference was February 16, 2011. MSI intends to vigorously defend this action. Because this action is in the early stages, the Company is unable to predict the outcome of this litigation at this time.

*APT Patent Litigation.* On January 18, 2011, Advanced Processor Technologies LLC (APT) filed a complaint in the United States District Court in the Eastern District of Texas. The complaint names MSI and eight other defendants and alleges infringement of United States Patent Nos. 6,047,359 (359 patent) and 5,796,978 (978 patent). The asserted patents purportedly relate to microprocessor technologies. The complaint seeks unspecified damages and a permanent injunction. A first amended complaint was filed on January 26, 2011. The first amended complaint continues to assert the 359 patent against MSI, but appears to no longer assert the 978 patent against MSI. MSI intends to vigorously defend this action. Because this action is in the very early stages, the Company is unable to predict the outcome of this litigation at this time.

*LAMD Patent Litigations.* On October 11, 2010, MIL filed a complaint against Link A Media Devices Corporation (LAMD) in the United States District Court for the District of Delaware. The complaint asserts that LAMD infringes its United States Patent Nos. 7,328,395, 7,751,138, 7,099,411 and 7,228,485. The complaint seeks unspecified damages and a permanent injunction.

On February 10, 2011, LAMD filed a complaint against MSI in the United States District Court for the Northern District of California. The complaint asserts that MSI infringes LAMD's United States Patent No. 7,590,927. The complaint seeks unspecified damages and a permanent injunction. MSI believes that it does not infringe any valid and enforceable claim of the LAMD patent in suit. MSI intends to litigate both actions vigorously.

*Mosaid Litigation.* On March 16, 2011, MOSAID Technologies Inc. filed suit in the Eastern District of Texas against MSI and sixteen other companies. The suit alleges that the defendants' products, which operate in compliance with the IEEE 802.11a, 802.11b, 802.11g, and 802.11n standards, infringe the six asserted patents (U.S. Patent nos. 5,131,006; 5,151,920; 5,422,887; 5,706,428; 6,563,768; 6,992,972). MSI intends to vigorously defend this action. Because this action is in the very early stages, the Company is unable to predict the outcome of this litigation at this time.

*General.* The Company is also party to various other legal proceedings and claims arising in the normal course of business. The legal proceedings and claims described above could result in substantial costs and could divert the attention and resources of the Company's management. Although the legal responsibility and financial impact with respect to these proceedings and claims cannot currently be ascertained, except as otherwise indicated above, an unfavorable outcome in such actions could have a material adverse effect on the Company's cash flows. For the matters that have not reached a settlement, the Company is unable to estimate a possible loss, or range of loss, with respect to the above mentioned legal matters. Litigation is subject to inherent uncertainties and unfavorable rulings could occur. An unfavorable ruling in litigation could require the Company to pay damages or one-time license fees or royalty payments, which could adversely impact gross margins in future periods, or could prevent the Company from manufacturing or selling some of its products or limit or restrict the type of work that employees involved in such litigation may perform for the Company. The Company believes that it competes lawfully and that its marketing, business and intellectual property benefit its customers and shareholders, and it will continue to conduct a vigorous defense in these proceedings. There can be no assurance that these matters will be resolved in a manner that is not adverse to the Company's business, financial condition, results of operations or cash flows.

---

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Indemnities, Commitments and Guarantees***

During its normal course of business, the Company has made certain indemnities, commitments and guarantees under which it may be required to make payments in relation to certain transactions. These indemnities include intellectual property indemnities to the Company's customers in connection with the sales of its products, indemnities for liabilities associated with the infringement of other parties' technology based upon the Company's products, indemnities to various lessors in connection with facility leases for certain claims arising from such facility or lease, and indemnities to directors and officers of the Company to the maximum extent permitted under the laws of Bermuda. In addition, the Company has contractual commitments to various customers, which could require the Company to incur costs to repair an epidemic defect with respect to its products outside of the normal warranty period if such defect were to occur. The duration of these indemnities, commitments and guarantees varies, and in certain cases, is indefinite. The majority of these indemnities, commitments and guarantees do not provide for any limitation of the maximum potential future payments that the Company could be obligated to make. The Company has not recorded any liability for these indemnities, commitments and guarantees in the accompanying Consolidated Balance Sheets. The Company does, however, accrue for losses for any known contingent liability, including those that may arise from indemnification provisions, when future payment is probable.

**Note 13 Segment and Geographic Information:**

The Company operates in one reportable segment – the design, development and sale of integrated circuits. The chief executive officer has been identified as the chief operating decision maker ( CODM ). The Company's CODM is ultimately responsible and actively involved in the allocation of resources and the assessment of the Company's operational and financial performance. The fact that the Company operates in only one reportable segment is based on the following:

The Company uses a highly integrated approach in developing its products in that discrete technologies developed by the Company are frequently integrated across many of its products. Substantially all of the Company's integrated circuits are manufactured under similar manufacturing processes. Therefore, the CODM makes financial decisions for the Company based on the consolidated financial performance and not necessarily based on any discrete financial information.

The Company's organizational structure is based along functional lines. Each of the functional department heads reports directly to the CODM. Shared resources in the Company also report directly to the CODM or to a direct report of the CODM.

The assessments of performance across the Company, including assessment of the Company's incentive compensation plan, are based largely on operational performance and consolidated financial performance.

The decisions on allocation of resources and other operational decisions are made by the CODM based on his hands-on involvement with the Company's operations and product development.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following tables present net revenue and long-lived asset information based on geographic region. Net revenue is based on the destination of the shipments and long-lived assets are based on the physical location of the assets (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
<b>Net Revenue:</b>			
United States	\$ 157,259	\$ 127,399	\$ 149,914
China	1,209,982	721,445	674,637
Thailand	602,639	484,862	417,319
Malaysia	348,271	301,504	305,033
Japan	99,173	192,126	376,409
Others	1,194,569	980,351	1,027,251
	\$ 3,611,893	\$ 2,807,687	\$ 2,950,563

	January 29, 2011	January 30, 2010
<b>Property and equipment, net:</b>		
Bermuda	\$ 9,797	\$ 8,100
Israel	18,389	15,964
Singapore	85,881	68,171
United States	202,049	200,957
Others	42,324	49,305
	\$ 358,440	\$ 342,497

The following table presents net revenue for groups of similar products (in thousands):

	January 29, 2011	Year Ended January 30, 2010	January 31, 2009
<b>Net Revenue:</b>			
Storage products	\$ 1,650,465	\$ 1,574,361	\$ 1,462,723
Communications products	1,961,428	1,233,326	1,487,840
	\$ 3,611,893	\$ 2,807,687	\$ 2,950,563

**Note 14 Related Party Transactions:**

MIL is party to a technology license agreement with VeriSilicon Holdings Co., Ltd. ( "VeriSilicon" ). MIL assumed this technology license agreement between VeriSilicon and UTStarcom, Inc. after the Company's acquisition of the semiconductor business of UTStarcom in December 2005. MIL has subsequently entered into various addenda to this agreement for additional technology beyond the scope of the original agreement. During fiscal 2010, MIL entered into three addenda with VeriSilicon related to the technology license agreement. In addition, in September 2010, MIL entered into a services agreement with VeriSilicon, pursuant to which VeriSilicon has agreed to provide design support services to MIL. In connection with all of its transactions with VeriSilicon, MIL paid \$2.5 million and \$855,000 in license and support fees to



## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

VeriSilicon during fiscal 2011 and fiscal 2010, respectively. Weili Dai's brother (and Dr. Sehat Sutardja's brother-in-law) is the Chairman, President and Chief Executive Officer of VeriSilicon. Ms. Dai is also a shareholder of VeriSilicon. Ms. Dai is a greater than ten percent shareholder of the Company and Dr. Sehat Sutardja is the Company's President and Chief Executive Officer. Dr. Sehat Sutardja and Ms. Dai are husband and wife.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In December 2009, MIL entered into a technology license agreement with Vivante Corporation ( Vivante ) that provides for the license of graphics technology and associated services. This agreement restates, expands and succeeds previous agreements between the parties for the same technology. The total amount of the license fee was \$12.0 million (paid over three years) and ten percent for support fees (paid over three years). In connection with all of its transactions, MIL paid Vivante \$5.3 million and \$1.6 million of license and support fees during fiscal 2011 and fiscal 2010, respectively. Dr. Sehat Sutardja and Ms. Dai, through their ownership and control of Estopia LLC, are indirect shareholders of Vivante. In addition, Dr. Sehat Sutardja is also a direct shareholder and Chairman of the board of directors of Vivante. Ms. Dai's brother (and Dr. Sehat Sutardja's brother-in-law) is the Chief Executive Officer of Vivante. Kuo Wei (Herbert) Chang, a member of the Company's Board of Directors, is also an indirect shareholder of Vivante as a partner of entities who have invested in Vivante.

**Supplementary Data (Unaudited)**

The following table presents the unaudited consolidated statements of operations data for each of the eight quarters in the period ended January 29, 2011. In management's opinion, this information has been presented on the same basis as the audited consolidated financial statements included in a separate section of this Annual Report on Form 10-K, and all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts below to fairly state the unaudited quarterly results when read in conjunction with the audited consolidated financial statements and related notes. The operating results for any period should not be considered indicative of results to be expected in any future period. The Company expects the quarterly operating results to fluctuate in future periods due to a variety of reasons, including those discussed in Part I, Item 1A Risk Factors.

	Fiscal 2011			
	First	Second	Third	Fourth
	Quarter (1)	Quarter	Quarter	Quarter (1)
	(In thousands, except per share amounts)			
Net revenue	\$ 855,579	\$ 896,474	\$ 959,327	\$ 900,513
Gross profit	\$ 511,594	\$ 529,792	\$ 568,519	\$ 528,714
Net income	\$ 205,767	\$ 219,777	\$ 255,732	\$ 222,853
Net income per share:				
Basic	\$ 0.32	\$ 0.34	\$ 0.39	\$ 0.34
Diluted	\$ 0.30	\$ 0.33	\$ 0.38	\$ 0.33

  

	Fiscal 2010			
	First	Second	Third	Fourth
	Quarter (2)	Quarter	Quarter (2)	Quarter
	(In thousands, except per share amounts)			
Net revenue	\$ 521,434	\$ 640,620	\$ 803,098	\$ 842,535
Gross profit	\$ 263,804	\$ 352,561	\$ 461,481	\$ 502,745
Net income (loss)	\$ (111,457)	\$ 58,493	\$ 201,599	\$ 204,821
Net income (loss) per share:				
Basic	\$ (0.18)	\$ 0.09	\$ 0.32	\$ 0.32
Diluted	\$ (0.18)	\$ 0.09	\$ 0.31	\$ 0.31

- (1) The fourth quarter of fiscal 2011 includes \$4.1 million for the portion of IP litigation settlements related to previous fiscal years. The first quarter of fiscal 2011 includes \$4.4 million for the portion of IP litigation settlements related to previous fiscal years.
- (2) The first quarter of fiscal 2010 includes a \$72.0 million charge in connection with the settlement of a class action litigation. The third quarter of fiscal 2010 includes a \$27.3 million benefit resulting from the expiration of the statute of limitations related to a tax contingency reserve, in addition to a \$5.3 million income tax benefit related to the adjustment of a prior year deferred tax asset.



## **Table of Contents**

### **Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

### **Item 9A. *Controls and Procedures***

#### **Management's Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of January 29, 2011. Disclosure controls and procedures are designed to ensure that information required to be disclosed is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of January 29, 2011, our disclosure controls and procedures were effective.

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

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has evaluated the effectiveness of our internal control over financial reporting as of January 29, 2011 using the criteria set forth in the *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation, management has concluded that we maintained effective internal control over financial reporting as of January 29, 2011 based on the COSO criteria.

The effectiveness of our internal control over financial reporting as of January 29, 2011 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report included in this Annual Report on Form 10-K.

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

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the three months ended January 29, 2011 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### **Inherent Limitations on Effectiveness of Controls**

Our management, including our Chief Executive Officer and our Chief Financial Officer, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

### **Item 9B. *Other Information***

None.

## **Table of Contents**

### **PART III**

#### **Item 10. *Directors, Executive Officers and Corporate Governance* Directors and Executive Officers**

The information required by Items 401 and 407(c)(3) of Regulation S-K with respect to our directors, director nominees and corporate governance is incorporated by reference herein to the information set forth under the captions Board of Directors and Committees of the Board Directors and Nominees and Board of Directors and Committees of the Board Nominations for Election of Directors in our definitive proxy statement in connection with our 2011 annual general meeting of shareholders (the 2011 Proxy Statement), which will be filed with the SEC no later than 120 days after January 29, 2011. The information regarding our current executive officers required by this item is also included in Part I, Item 1 hereof under the caption Executive Officers of the Registrant and incorporated by reference herein.

#### **Section 16(a) Beneficial Ownership Reporting Compliance**

The information required by Item 405 of Regulation S-K is incorporated by reference herein to the information set forth under the caption Section 16(a) Beneficial Ownership Reporting Compliance in our 2011 Proxy Statement.

#### **Code of Ethics**

We have adopted a Code of Ethics and Business Conduct for Employees, Officers and Directors that applies to all of our directors, officers (including our Chief Executive Officer (our principal executive officer), Chief Financial Officer (our principal financial and accounting officer), Corporate Controller and any person performing similar functions) and employees. This Code of Ethics was most recently amended as of December 11, 2008. We will disclose future amendments to or waivers from our Code of Ethics and Business Conduct for Employees, Officers and Directors on our website or in a report on Form 8-K within four business days following the date of such amendment or waiver. Our Code of Ethics and Business Conduct for Employees, Officers and Directors is available on our website [www.marvell.com](http://www.marvell.com). None of the material on this website is part of this Annual Report on Form 10-K or is incorporated by reference herein.

#### **Committees of the Board of Directors**

The information required by Items 407(d)(4) and (d)(5) of Regulation S-K concerning our Audit Committee and audit committee financial expert is incorporated by reference herein to the information set forth under the caption Board of Directors and Committees of the Board Committees of our Board of Directors in our 2011 Proxy Statement.

#### **Item 11. *Executive Compensation***

The information required by Items 402, 407(e)(4) and 407(e)(5) of Regulation S-K is incorporated by reference herein to the information set forth under the caption Board of Directors and Committees of the Board Director Compensation Table, Executive Compensation and Executive Compensation Committee Interlocks and Insider Participation in our 2011 Proxy Statement.

#### **Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information required by Item 403 of Regulation S-K is incorporated by reference herein to the information set forth under the caption Security Ownership of Certain Beneficial Owners and Management in our 2011 Proxy Statement.

**Table of Contents****Securities Authorized for Issuance under Equity Compensation Plans****Equity Compensation Plan Information**

The following table provides certain information with respect to all of our equity compensation plans in effect as of January 29, 2011:

<b>Plan Category</b>	<b>(a) Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)</b>	<b>(b) Weighted- Average Exercise Price of Outstanding Options, Warrants, and Rights (2)</b>	<b>(c) Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a))</b>
Equity compensation plans approved by security holders (3)(4)	61,674,747	\$ 11.08	155,334,621
Equity compensation plans not approved by security holders (5)	134,712	\$ 0.10	
<b>Total</b>	<b>61,809,459</b>	<b>\$ 11.05</b>	<b>155,334,621</b>

- (1) Includes only options and restricted stock units (outstanding under our equity compensation plans, as no stock warrants or other rights were outstanding as of January 29, 2011).
- (2) The weighted average exercise price calculation does not take into account any restricted stock units as those units vest, without any cash consideration or other payment required for such shares.
- (3) Includes our Amended and Restated 1995 Stock Option Plan (the "1995 Plan"), our 1997 Directors' Stock Option Plan, our Amended 2000 Employee Stock Purchase Plan (the "2000 ESPP") and our 2007 Directors' Stock Option Plan.
- (4) The number of shares reserved for grant under the 1995 Plan is subject to an annual increase in shares reserved for issuance equal to the lesser of (i) 20,000,000 Shares, or (ii) 2.5% of the outstanding shares of capital stock on such date, or (iii) an amount determined by the Board (provided that the amount approved by the Board shall not be greater than (i) or (ii)). The number of shares reserved for issuance under our 2000 ESPP includes an annual increase in shares reserved for issuance equal to the lesser of (i) 8,000,000 shares of Common Stock, or (ii) 1.5% of the outstanding shares of capital stock on such date, or (iii) an amount determined by the Board (provided that the amount approved by the Board shall not be greater than (i) or (ii)).
- (5) Consists of 70,060 common shares reserved for issuance under options we granted to former option holders of SysKonnnect GmbH in connection with our acquisition of SysKonnnect GmbH, 56,928 common shares reserved for issuance under options granted by the Company to former option holders of RADLAN Computer Communications Ltd. in connection with our acquisition of RADLAN Computer Communications Ltd. and 7,724 common shares reserved for issuance under options we granted to former option holders of Asica, Inc. in connection with our acquisition of Asica, Inc.

**Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by Item 404 of Regulation S-K is incorporated by reference herein to the information set forth under the caption "Related Party Transactions" in our 2011 Proxy Statement.

The information required by Item 407(a) of Regulation S-K is incorporated by reference herein to the information set forth under the caption "Board of Directors and Committees of the Board" in our 2011 Proxy Statement.

**Table of Contents**

**Item 14. *Principal Accounting Fees and Services***

The information required by Item 9(e) of Schedule 14A is incorporated by reference to the information set forth under the caption **Information Concerning Independent Registered Public Accounting Firm** in our 2011 Proxy Statement.



**Table of Contents**

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules**

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. *Financial Statements:*

	<b>Page Reference</b>
<u>Consolidated Balance Sheets as of January 29, 2011 and January 30, 2010</u>	60
<u>Consolidated Statements of Operations for the years ended January 29, 2011, January 30, 2010 and January 31, 2009</u>	61
<u>Consolidated Statements of Shareholders' Equity for the years ended January 29, 2011, January 30, 2010 and January 31, 2009</u>	62
<u>Consolidated Statements of Cash Flows for the years ended January 29, 2011, January 30, 2010 and January 31, 2009</u>	63
Notes to Consolidated Financial Statements	64

2. *Financial Statement Schedule:*

The following financial statement schedule is filed as part of this Form 10-K:

	<b>Page Reference</b>
Schedule II Valuation and Qualifying Account	108

All other schedules not listed above have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto.

3. *Exhibits.*

See Item 15(b) below.

(b) *Index to Exhibits*

<b>Exhibit No.</b>	<b>Description</b>
2.1	Asset Purchase Agreement dated as of June 26, 2006 by and between Intel Corporation and Marvell Technology Group Ltd., incorporated by reference to Exhibit 2.1 of the registrant's Current Report on Form 8-K as filed on November 14, 2006
3.1	Memorandum of Association of the registrant, incorporated by reference to Exhibit 3.1 of the registrant's Registration Statement on Form S-1 (file no. 333-33086) as filed on March 23, 2000
3.2	

## Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Third Amended and Restated Bye-Laws of the registrant, incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K as filed on July 13, 2010

3.3 Memorandum of Increase of Share Capital of Marvell Technology Group Ltd., incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K as filed on July 6, 2006

10.1# 1997 Directors' Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Registration Statement on Form S-1 (file no. 333-33086) as filed on March 23, 2000

## **Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
10.2#	Form of Notice of Option Grants, Nonstatutory Stock Option Agreement, Exercise Notice and restricted Stock Purchase Agreement for use under the 1997 Directors' Stock Option Plan, incorporated by reference to Exhibit 10.7 of the registrant's Registration Statement on Form S-8 as filed on January 11, 2008
10.3#	2000 Employee Stock Purchase Plan (as amended and restated as of October 22, 2009), incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on October 28, 2009
10.4#	2000 Employee Stock Purchase Plan Form of Subscription Agreement, incorporated by reference to Exhibit 10.3 of the registrant's quarterly report on 10-Q for the period ended October 31, 2009 as filed on December 9, 2009
10.5#	Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.24 of the registrant's quarterly report on 10-Q for the period ended July 30, 2005 as filed on September 8, 2005
10.6#	2010 Amendment to the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Current Report on Form 8-K as filed on July 13, 2010
10.7#	Amended and Restated 1995 Stock Option Plan Restricted Stock Agreement, incorporated by reference to Exhibit 10.20 of the registrant's Annual Report on Form 10-K for the year ended January 28, 2006 as filed on April 13, 2006
10.8#	Form of Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.21 of the registrant's Annual Report on Form 10-K for the year ended January 28, 2006 as filed on April 13, 2006
10.8.1#	Form of Stock Option Agreement and Notice of Grant of Stock Options and Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on December 17, 2008 (for options granted on or after December 4, 2008)
10.8.2#	Form of Stock Option Agreement and Notice of Grant of Stock Options and Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.3 of the registrant's quarterly report on 10-Q for the period ended July 31, 2010 as filed on September 3, 2010 (for options granted on or after August 2, 2010)
10.9#	Form of Restricted Stock Unit Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.34 of the registrant's Annual Report on Form 10-K for the year ended January 27, 2007 as filed on July 2, 2007
10.9.1#	Form of Stock Unit Agreement and Notice of Grant of Award and Award Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Current Report on Form 8-K as filed on December 17, 2008 (for RSUs granted on or after December 4, 2008)
10.9.2#	Form of Stock Unit Agreement and Notice of Grant of Award and Award Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.4 of the registrant's quarterly report on 10-Q for the period ended July 31, 2010 as filed on September 3, 2010 (for RSUs granted on or after August 2, 2010)
10.10#	Form of Notice of Grant of Stock Options (performance-based vesting) for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on January 2, 2008

## **Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
10.11#	Form of Notice of Grant of Stock Options – Performance-Based, for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on December 19, 2008
10.12#	Reformation of Stock Option Agreement dated December 27, 2006 by and between Sehat Sutardja and Marvell Technology Group Ltd., incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on January 4, 2007
10.13#	Reformation of Stock Option Agreement dated December 28, 2006 by and between Pantas Sutardja and Marvell Technology Group Ltd., incorporated by reference to Exhibit 10.3 of the registrant’s Current Report on Form 8-K as filed on January 4, 2007
10.14#	Reformation of Stock Option Agreement dated May 6, 2007 between Marvell Technology Group Ltd. and Dr. Sehat Sutardja, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on May 8, 2007
10.15#	Marvell Technology Group Ltd. Executive Performance Incentive Plan, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on July 13, 2010
10.16#	2007 Director Stock Incentive Plan, as amended and restated on August 25, 2010, incorporated by reference to Exhibit 10.1 of the registrant’s quarterly report on 10-Q for the period ended November 23, 2010 as filed on September 3, 2010
10.17#	Form of Stock Option Agreement for use with the 2007 Director Stock Incentive Plan – Initial Award, incorporated by reference to Exhibit 10.2 of the registrant’s Current Report on Form 8-K as filed on October 25, 2007
10.18#	Form of Stock Option Agreement for use with the 2007 Director Stock Incentive Plan – Annual Award, incorporated by reference to Exhibit 10.3 of the registrant’s Current Report on Form 8-K as filed on October 25, 2007
10.19#	Employment Offer Letter executed on May 29, 2008 between the Company and Clyde Hosein, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on May 30, 2008
10.20#	Policy for Non-Business Use of Corporate Aircraft, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on May 23, 2008
10.21#	Description of Indemnification Rights for certain current and former directors, officers and employees, incorporated by reference to Exhibit 10.37 of the registrant’s Quarterly Report on Form 10-Q for the period ended July 28, 2007 as filed on September 6, 2007
10.22#	Form of Indemnification Agreement with Directors and Executive Officers, incorporated by reference to Exhibit 10.1 of the registrant’s Current Report on Form 8-K as filed on October 10, 2008
21.1	Subsidiaries of the registrant
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney (contained in the signature page to this Annual Report)
31.1	Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
31.2	Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer

## **Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
32.1~	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
32.2~	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer
99.1	Notice of Proposed Settlement of Derivative Action, incorporated by reference to Exhibit 99.1 of the registrant's Current Report on Form 8-K as filed on May 28, 2009
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Presentation Linkbase Document

- # 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 and 32.2 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.
- \*\* Pursuant to applicable securities laws and regulations, we are deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and are not subject to liability under any anti-fraud provisions of the federal securities laws as long as we have made a good faith attempt to comply with the submission requirements and promptly amend the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. Users of this data are advised that, pursuant to Rule 406T, these interactive data files are deemed not filed and otherwise are not subject to liability.

(c) *Financial Statements Required by Regulation S-X which are excluded from the annual report to Shareholders by Rule 14a-3(b).*  
Not applicable.

**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.

MARVELL TECHNOLOGY GROUP LTD.

Dated: March 25, 2011

By: /s/ DR. SEHAT SUTARDJA  
**Dr. Sehat Sutardja**

*President and Chief Executive Officer*

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Sehat Sutardja and Clyde R. Hosein, and each of them individually, as his attorney-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and all other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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

<b>Name and Signature</b>	<b>Title</b>	<b>Date</b>
/s/ SEHAT SUTARDJA Dr. Sehat Sutardja	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	March 25, 2011
/s/ CLYDE R. HOSEIN Clyde R. Hosein	Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	March 25, 2011
/s/ PANTAS SUTARDJA Dr. Pantas Sutardja	Vice President, Chief Technology Officer, Chief Research and Development Officer and Director	March 25, 2011
/s/ HERBERT CHANG Kuo Wei (Herbert) Chang	Director	March 25, 2011
/s/ JUERGEN GROMER Dr. Juergen Gromer	Director	March 25, 2011
/s/ TA-LIN HSU Dr. Ta-lin Hsu	Director	March 25, 2011
/s/ JOHN G. KASSAKIAN	Director	March 25, 2011

Edgar Filing: MARVELL TECHNOLOGY GROUP LTD - Form 10-K

Dr. John G. Kassakian

/s/ ARTURO KRUEGER

Director

March 25, 2011

Arturo Krueger

107

**Table of Contents****Schedule II****VALUATION AND QUALIFYING ACCOUNTS**

	<b>Balance at Beginning of Year</b>	<b>Additions (in thousands)</b>	<b>Deductions</b>	<b>Balance at End of Year</b>
<b>Fiscal year ended January 29, 2011</b>				
Allowance for doubtful accounts and sales return reserve	\$ 5,912	\$ 12,217	\$ (10,763)	\$ 7,366
Deferred tax valuation	\$ 197,710	\$ 30,621	\$ (3,478)	\$ 224,853
<b>Fiscal year ended January 30, 2010</b>				
Allowance for doubtful accounts and sales return reserve	\$ 3,206	\$ 6,714	\$ (4,008)	\$ 5,912
Deferred tax valuation	\$ 134,576	\$ 77,353	\$ (14,219)	\$ 197,710
<b>Fiscal year ended January 31, 2009</b>				
Allowance for doubtful accounts and sales return reserve	\$ 4,277	\$ 1,261	\$ (2,332)	\$ 3,206
Deferred tax valuation	\$ 96,978	\$ 40,990	\$ (3,392)	\$ 134,576



**Table of Contents**

**INDEX TO EXHIBITS**

<b>Exhibit No.</b>	<b>Description</b>
2.1	Asset Purchase Agreement dated as of June 26, 2006 by and between Intel Corporation and Marvell Technology Group Ltd., incorporated by reference to Exhibit 2.1 of the registrant's Current Report on Form 8-K as filed on November 14, 2006
3.1	Memorandum of Association of the registrant, incorporated by reference to Exhibit 3.1 of the registrant's Registration Statement on Form S-1 (file no. 333-33086) as filed on March 23, 2000
3.2	Third Amended and Restated Bye-Laws of the registrant, incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K as filed on July 13, 2010
3.3	Memorandum of Increase of Share Capital of Marvell Technology Group Ltd., incorporated by reference to Exhibit 3.1 of the registrant's Current Report on Form 8-K as filed on July 6, 2006
10.1#	1997 Directors' Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Registration Statement on Form S-1 (file no. 333-33086) as filed on March 23, 2000
10.2#	Form of Notice of Option Grants, Nonstatutory Stock Option Agreement, Exercise Notice and restricted Stock Purchase Agreement for use under the 1997 Directors' Stock Option Plan, incorporated by reference to Exhibit 10.7 of the registrant's Registration Statement on Form S-8 as filed on January 11, 2008
10.3#	2000 Employee Stock Purchase Plan (as amended and restated as of October 22, 2009), incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on October 28, 2009
10.4#	2000 Employee Stock Purchase Plan Form of Subscription Agreement, incorporated by reference to Exhibit 10.3 of the registrant's quarterly report on 10-Q for the period ended October 31, 2009 as filed on December 9, 2009
10.5#	Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.24 of the registrant's quarterly report on 10-Q for the period ended July 30, 2005 as filed on September 8, 2005
10.6#	2010 Amendment to the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Current Report on Form 8-K as filed on July 13, 2010
10.7#	Amended and Restated 1995 Stock Option Plan Restricted Stock Agreement, incorporated by reference to Exhibit 10.20 of the registrant's Annual Report on Form 10-K for the year ended January 28, 2006 as filed on April 13, 2006
10.8#	Form of Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.21 of the registrant's Annual Report on Form 10-K for the year ended January 28, 2006 as filed on April 13, 2006
10.8.1#	Form of Stock Option Agreement and Notice of Grant of Stock Options and Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on December 17, 2008 (for options granted on or after December 4, 2008)
10.8.2#	Form of Stock Option Agreement and Notice of Grant of Stock Options and Option Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.3 of the registrant's quarterly report on 10-Q for the period ended July 31, 2010 as filed on September 3, 2010 (for options granted on or after August 2, 2010)
10.9#	Form of Restricted Stock Unit Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.34 of the registrant's Annual Report on Form 10-K for the year ended January 27, 2007 as filed on July 2, 2007

## **Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
10.9.1#	Form of Stock Unit Agreement and Notice of Grant of Award and Award Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.2 of the registrant's Current Report on Form 8-K as filed on December 17, 2008 (for RSUs granted on or after December 4, 2008)
10.9.2#	Form of Stock Unit Agreement and Notice of Grant of Award and Award Agreement for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.4 of the registrant's quarterly report on 10-Q for the period ended July 31, 2010 as filed on September 3, 2010 (for RSUs granted on or after August 2, 2010)
10.10#	Form of Notice of Grant of Stock Options (performance-based vesting) for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on January 2, 2008
10.11#	Form of Notice of Grant of Stock Options - Performance-Based, for use with the Amended and Restated 1995 Stock Option Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on December 19, 2008
10.12#	Reformation of Stock Option Agreement dated December 27, 2006 by and between Sehat Sutardja and Marvell Technology Group Ltd., incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on January 4, 2007
10.13#	Reformation of Stock Option Agreement dated December 28, 2006 by and between Pantas Sutardja and Marvell Technology Group Ltd., incorporated by reference to Exhibit 10.3 of the registrant's Current Report on Form 8-K as filed on January 4, 2007
10.14#	Reformation of Stock Option Agreement dated May 6, 2007 between Marvell Technology Group Ltd. and Dr. Sehat Sutardja, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on May 8, 2007
10.15#	Marvell Technology Group Ltd. Executive Performance Incentive Plan, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on July 13, 2010
10.16#	2007 Director Stock Incentive Plan, as amended and restated on August 25, 2010, incorporated by reference to Exhibit 10.1 of the registrant's quarterly report on 10-Q for the period ended November 23, 2010 as filed on September 3, 2010
10.17#	Form of Stock Option Agreement for use with the 2007 Director Stock Incentive Plan - Initial Award, incorporated by reference to Exhibit 10.2 of the registrant's Current Report on Form 8-K as filed on October 25, 2007
10.18#	Form of Stock Option Agreement for use with the 2007 Director Stock Incentive Plan - Annual Award, incorporated by reference to Exhibit 10.3 of the registrant's Current Report on Form 8-K as filed on October 25, 2007
10.19#	Employment Offer Letter executed on May 29, 2008 between the Company and Clyde Hosein, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on May 30, 2008
10.20#	Policy for Non-Business Use of Corporate Aircraft, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on May 23, 2008
10.21#	Description of Indemnification Rights for certain current and former directors, officers and employees, incorporated by reference to Exhibit 10.37 of the registrant's Quarterly Report on Form 10-Q for the period ended July 28, 2007 as filed on September 6, 2007
10.22#	Form of Indemnification Agreement with Directors and Executive Officers, incorporated by reference to Exhibit 10.1 of the registrant's Current Report on Form 8-K as filed on October 10, 2008

## **Table of Contents**

<b>Exhibit No.</b>	<b>Description</b>
21.1	Subsidiaries of the registrant
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney (contained in the signature page to this Annual Report)
31.1	Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
31.2	Certification Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer
32.1~	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
32.2~	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer
99.1	Notice of Proposed Settlement of Derivative Action, incorporated by reference to Exhibit 99.1 of the registrant's Current Report on Form 8-K as filed on May 28, 2009
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Presentation Linkbase Document
#	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 and 32.2 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.
**	Pursuant to applicable securities laws and regulations, we are deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and are not subject to liability under any anti-fraud provisions of the federal securities laws as long as we have made a good faith attempt to comply with the submission requirements and promptly amend the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. Users of this data are advised that, pursuant to Rule 406T, these interactive data files are deemed not filed and otherwise are not subject to liability.