

MARVELL TECHNOLOGY GROUP LTD  
Form 10-Q  
August 10, 2016  
Table of Contents

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended April 30, 2016

or

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

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

Commission file number: 000-30877

**Marvell Technology Group Ltd.**

(Exact name of registrant as specified in its charter)

**Bermuda**  
(State or other jurisdiction of

**77-0481679**  
(I.R.S. Employer

incorporation or organization)

Identification No.)

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

**(441) 296-6395**

(Address of principal executive offices, Zip Code and registrant s telephone number, including area code)

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

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

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

Accelerated filer

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

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 number of common shares of the registrant outstanding as of July 29, 2016 was 511.2 million shares.

**Table of Contents****TABLE OF CONTENTS**

	<b>Page</b>
<b><u>PART I. FINANCIAL INFORMATION</u></b>	
Item 1. <u>Financial Statements:</u>	
<u>Unaudited Condensed Consolidated Balance Sheets as of April 30, 2016 and January 30, 2016</u>	2
<u>Unaudited Condensed Consolidated Statements of Operations for the three months ended April 30, 2016 and May 2, 2015</u>	3
<u>Unaudited Condensed Consolidated Statements of Comprehensive Income (Loss) for the three months ended April 30, 2016 and May 2, 2015</u>	4
<u>Unaudited Condensed Consolidated Statements of Cash Flows for the three months ended April 30, 2016 and May 2, 2015</u>	5
<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>	6
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	24
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	31
Item 4. <u>Controls and Procedures</u>	32
<b><u>PART II. OTHER INFORMATION</u></b>	
Item 1. <u>Legal Proceedings</u>	37
Item 1A. <u>Risk Factors</u>	37
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	52
Item 6. <u>Exhibits</u>	52
<u>Signatures</u>	53

**EXPLANATORY NOTE**

As previously reported, we were unable to timely file our Quarterly Reports on Form 10-Q for the first quarter of fiscal 2017 ended April 30, 2016, as a result of the resignation of our independent registered public accounting firm and an Audit Committee investigation as described in our Annual Report on Form 10-K for fiscal 2016 filed on July 21, 2016. As previously reported, we retained Deloitte & Touche LLP as our independent registered public accounting firm and the Audit Committee subsequently completed its investigation.

**Table of Contents****PART I: FINANCIAL INFORMATION****Item 1. Financial Statements****MARVELL TECHNOLOGY GROUP LTD.****UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS****(In thousands, except par value per share)**

	<b>April 30, 2016</b>	<b>January 30, 2016</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 780,222	\$ 1,278,180
Short-term investments	835,018	1,004,569
Accounts receivable, net	280,658	323,300
Inventories	196,739	210,017
Prepaid expenses and other current assets	57,139	102,560
Total current assets	2,149,776	2,918,626
Property and equipment, net	283,584	299,540
Long-term investments	8,974	11,296
Goodwill	2,029,945	2,029,945
Acquired intangible assets, net	15,064	18,010
Other non-current assets	169,778	164,710
Total assets	\$ 4,657,121	\$ 5,442,127
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 193,697	\$ 180,372
Accrued liabilities	107,731	132,060
Carnegie Mellon University accrued litigation settlement		736,000
Accrued employee compensation	128,783	121,631
Deferred income	54,488	55,722
Total current liabilities	484,699	1,225,785
Non-current income taxes payable	50,046	49,256
Other non-current liabilities	22,558	26,963
Total liabilities	557,303	1,302,004
Commitments and contingencies (Note 10)		
Shareholders' equity:		
Common shares, \$0.002 par value	1,022	1,015
Additional paid-in capital	3,038,732	3,028,921
Accumulated other comprehensive income (loss)	2,222	(795)
Retained earnings	1,057,842	1,110,982
Total shareholders' equity	4,099,818	4,140,123
Total liabilities and shareholders' equity	\$ 4,657,121	\$ 5,442,127

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

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS****(In thousands, except per share amounts)**

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
Net revenue	\$ 540,822	\$ 724,288
Operating costs and expenses:		
Cost of goods sold	259,210	351,153
Research and development	240,458	280,114
Selling and marketing	31,379	36,174
General and administrative	31,995	40,435
Restructuring and other related charges	4,441	592
Amortization of acquired intangible assets	2,461	2,568
<b>Total operating costs and expenses</b>	<b>569,944</b>	<b>711,036</b>
Operating income (loss)	(29,122)	13,252
Interest and other income, net	1,488	5,167
Income (loss) before income taxes	(27,634)	18,419
Provision (benefit) for income taxes	(4,955)	4,329
Net income (loss)	\$ (22,679)	\$ 14,090
Net income (loss) per share:		
Basic	\$ (0.04)	\$ 0.03
Diluted	\$ (0.04)	\$ 0.03
Weighted average shares:		
Basic	508,794	516,228
Diluted	508,794	527,167
Cash dividend declared per share	\$ 0.06	\$ 0.06

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)****(In thousands)**

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
Net income (loss)	\$ (22,679)	\$ 14,090
Other comprehensive income (loss), net of tax:		
Net change in unrealized gain/loss on marketable securities	2,433	(1,860)
Net change in unrealized gain/loss on auction rate securities		(115)
Net change in unrealized gain/loss on cash flow hedges	584	1,747
Other comprehensive income (loss), net of tax	3,017	(228)
Comprehensive income (loss), net of tax	\$ (19,662)	\$ 13,862

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS****(In thousands)**

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
<b>Cash flows from operating activities:</b>		
Net income (loss)	\$ (22,679)	\$ 14,090
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	21,788	26,620
Share-based compensation	24,453	33,221
Amortization of acquired intangible assets	2,946	3,053
Non-cash restructuring and other related charges	896	573
Other non-cash expense (income), net	1,361	(561)
Excess tax benefits from share-based compensation		(18)
Changes in assets and liabilities:		
Accounts receivable	42,642	27,141
Inventories	13,598	(31,318)
Prepaid expenses and other assets	38,056	1,969
Accounts payable	19,922	17,125
Accrued liabilities and other non-current liabilities	(22,502)	(11,576)
Carnegie Mellon University accrued litigation settlement	(736,000)	
Accrued employee compensation	7,152	(14,424)
Deferred income	(1,234)	(7,027)
Net cash provided by (used in) operating activities	(609,601)	58,868
<b>Cash flows from investing activities:</b>		
Purchases of available-for-sale securities	(93,365)	(392,900)
Sales of available-for-sale securities	218,522	152,568
Maturities of available-for-sale securities	97,788	94,927
Purchases of time deposits	(50,000)	
Purchases of technology licenses	(4,050)	(3,606)
Purchases of property and equipment	(6,542)	(7,334)
Purchase of equipment previously leased		(10,240)
Net cash provided by (used in) investing activities	162,353	(166,585)
<b>Cash flows from financing activities:</b>		
Repurchase of common stock		(20,273)
Proceeds from employee stock plans	315	13,013
Minimum tax withholding paid on behalf of employees for net share settlement	(15,270)	(22,310)
Dividend payments to shareholders	(30,461)	(30,910)
Payments on technology license obligations	(5,294)	(4,067)
Excess tax benefits from share-based compensation		18
Net cash used in financing activities	(50,710)	(64,529)
Net decrease in cash and cash equivalents	(497,958)	(172,246)
Cash and cash equivalents at beginning of period	1,278,180	1,210,977



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

Cash and cash equivalents at end of period	\$ 780,222	\$ 1,038,731
--	------------	--------------

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1. The Company and Basis of Presentation**

***The Company***

Marvell Technology Group Ltd., a Bermuda company, and its subsidiaries (the Company), is a fabless 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 and System-in-a-Package devices, leveraging its extensive technology portfolio of intellectual property in the areas of analog, mixed-signal, digital signal processing, and embedded and stand alone integrated circuits. The majority of the Company's product portfolio leverages embedded central processing unit technology. The Company also develops platforms that it defines as integrated hardware along with software that incorporates digital computing technologies designed and configured to provide an optimized computing solution. The Company's broad product portfolio includes devices for data storage, enterprise-class Ethernet data switching, Ethernet physical-layer transceivers, wireless connectivity, Internet-of-Things devices and multimedia 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 2017 and 2016 each has a 52-week period.

The unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and notes required by GAAP for annual financial statements. In the opinion of management, all adjustments consisting of normal and recurring entries considered necessary for a fair statement of the results for the interim periods have been included in the Company's unaudited condensed consolidated balance sheet as of April 30, 2016, the results of its operations for the three months ended April 30, 2016 and May 2, 2015, its comprehensive income (loss) for the three months ended April 30, 2016 and May 2, 2015, and its cash flows for the three months ended April 30, 2016 and May 2, 2015. The January 30, 2016 condensed consolidated balance sheet data was derived from the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended January 30, 2016, but does not include all disclosures required for annual periods.

These condensed consolidated financial statements and related notes are unaudited and should be read in conjunction with the Company's audited financial statements and related notes included in the Company's Annual Report on Form 10-K for the fiscal year ended January 30, 2016 as filed on July 21, 2016 with the Securities and Exchange Commission. The results of operations for the three months ended April 30, 2016 are not necessarily indicative of the results that may be expected for any other interim period or for the full fiscal year.

***Use of Estimates***

The preparation of consolidated financial statements in conformity with 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 ongoing basis, the Company evaluates its estimates, including those related to performance-based compensation, revenue recognition, provisions for sales returns and allowances, inventory excess and obsolescence, investment fair values, goodwill and other intangible assets, restructuring, income taxes, litigation and other contingencies. In addition, the Company uses assumptions when employing the Monte Carlo simulation and Black-Scholes valuation models to calculate the fair value of share-based awards that are granted. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods.

***Principles of Consolidation***

The unaudited condensed 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 U.S. dollar.



**Table of Contents****MARVELL TECHNOLOGY GROUP LTD.****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 2. Recent Accounting Pronouncements***Accounting Pronouncements Recently Adopted*

In April 2015, the Financial Accounting Standards Board issued new guidance to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement, which was effective for the Company beginning in the first quarter of fiscal 2017. The guidance provides a basis for evaluating whether a cloud computing arrangement includes a software license and whether the license arrangement should be accounted for as an intangible asset. This guidance also strikes from previous authoritative guidance, the use by analogy to the accounting for capital leases, which the Company applied in the accounting for certain of its technology license agreements. As such, the Company will account for any new agreements on a prospective basis in accordance with the new guidance and will re-evaluate the accounting for any renewals to existing license agreements. There was no significant impact from this change in accounting policy in the three months ended April 30, 2016.

**Note 3. Investments**

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

	April 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>Short-term investments:</b>				
Available-for-sale:				
Corporate debt securities	\$ 475,447	\$ 2,032	\$ (349)	\$ 477,130
U.S. government and agency debt	213,256	88	(96)	213,248
Asset backed securities	50,341	115	(17)	50,439
Time deposits	50,000			50,000
Foreign government and agency debt	15,504	4	(8)	15,500
Municipal debt securities	28,693	17	(9)	28,701
<b>Total short-term investments</b>	<b>833,241</b>	<b>2,256</b>	<b>(479)</b>	<b>835,018</b>
<b>Long-term investments:</b>				
Available-for-sale:				
Auction rate securities	8,974			8,974
<b>Total long-term investments</b>	<b>8,974</b>			<b>8,974</b>
<b>Total investments</b>	<b>\$ 842,215</b>	<b>\$ 2,256</b>	<b>\$ (479)</b>	<b>\$ 843,992</b>

	January 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
<b>Short-term investments:</b>				
Available-for-sale:				
Corporate debt securities	\$ 558,337	\$ 766	\$ (1,282)	\$ 557,821
U.S. government and agency debt	317,595	64	(254)	317,405

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

Asset backed securities	76,711	81	(56)	76,736
Foreign government and agency debt	21,370	2	(14)	21,358
Municipal debt securities	31,211	45	(7)	31,249
Total short-term investments	1,005,224	958	(1,613)	1,004,569
<b>Long-term investments:</b>				
Available-for-sale:				
Auction rate securities	11,296			11,296
Total long-term investments	11,296			11,296
Total investments	\$ 1,016,520	\$ 958	\$ (1,613)	\$ 1,015,865

As of April 30, 2016, the Company's investment portfolio included auction rate securities with an aggregate par value of \$10.0 million. Although these auction rate securities have continued to pay interest and the underlying collateral has not deteriorated, there

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

is currently limited trading volume. The Company uses a discounted cash flow model to estimate the fair value of the auction rate securities based on its estimated timing and amount of future interest and principal payments. In developing the cash flow model, the Company considers the credit quality and liquidity of the underlying securities and related issuer, the collateralization of underlying security investments and other considerations.

The Company made a determination in January 2016 that it did not expect to recover the par value of these auction rate securities and considers any impairment of these securities to be other-than-temporary. There has been no change in circumstances since January 2016 based upon the current time horizon for holding these securities and the continuation of an illiquid market. Based on the Company's assessment of fair value as of April 30, 2016, the Company determined there was no further impairment of these auction rate securities.

During the three months ended April 30, 2016, the Company sold auction rate securities, which had an aggregate par value of \$2.5 million, for net proceeds of \$2.4 million. The carrying value of these auction rate securities was previously written down to \$2.3 million and, therefore, resulted in a gain of \$0.1 million upon its sale.

Gross realized gains and gross realized losses on sales of available-for-sales securities are presented in the following table (in thousands):

	Three Months Ended	
	April 30, 2016	May 2, 2015
Gross realized gains	\$ 388	\$ 443
Gross realized losses	(224)	(107)
<b>Total net realized gains</b>	<b>\$ 164</b>	<b>\$ 336</b>

The contractual maturities of available-for-sale securities are presented in the following table (in thousands):

	April 30, 2016		January 30, 2016	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due in one year or less	\$ 265,259	\$ 265,285	\$ 304,117	\$ 304,035
Due between one and five years	558,663	560,405	689,847	689,279
Due over five years	18,293	18,302	22,556	22,551
	<b>\$ 842,215</b>	<b>\$ 843,992</b>	<b>\$ 1,016,520</b>	<b>\$ 1,015,865</b>

For individual securities that have been in a continuous unrealized loss position, the fair value and gross unrealized loss for these securities aggregated by investment category and length of time in an unrealized position are presented in the following tables (in thousands):

	April 30, 2016	
Less than 12 months	12 months or more	Total

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

	<b>Fair Value</b>	<b>Unrealized Loss</b>	<b>Fair Value</b>	<b>Unrealized Loss</b>	<b>Fair Value</b>	<b>Unrealized Loss</b>
Corporate debt securities	\$ 116,376	\$ (288)	\$ 23,597	\$ (61)	\$ 139,973	\$ (349)
U.S. government and agency debt	110,771	(90)	4,993	(6)	115,764	(96)
Asset backed securities	11,562	(17)			11,562	(17)
Foreign government and agency debt	8,847	(8)			8,847	(8)
Municipal debt securities	9,387	(8)	499	(1)	9,886	(9)
Total securities	\$ 256,943	\$ (411)	\$ 29,089	\$ (68)	\$ 286,032	\$ (479)

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

	Less than 12 months		January 30, 2016 12 months or more		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	\$ 283,138	\$ (1,237)	\$ 14,383	\$ (45)	\$ 297,521	\$ (1,282)
U.S. government and agency debt	263,325	(254)			263,325	(254)
Asset backed securities	46,646	(56)			46,646	(56)
Foreign government and agency debt	16,458	(14)			16,458	(14)
Municipal debt securities	2,943	(5)	1,571	(2)	4,514	(7)
Total securities	\$ 612,510	\$ (1,566)	\$ 15,954	\$ (47)	\$ 628,464	\$ (1,613)

**Note 4. Supplemental Financial Information (in thousands)****Consolidated Balance Sheets**

	April 30, 2016	January 30, 2016
<b>Inventories:</b>		
Work-in-process	\$ 128,183	\$ 131,471
Finished goods	68,556	78,546
Total inventories	\$ 196,739	\$ 210,017
	April 30, 2016	January 30, 2016
<b>Property and equipment, net:</b>		
Machinery and equipment	\$ 580,885	\$ 578,627
Buildings	144,320	144,320
Computer software	99,272	102,928
Land	53,373	53,373
Building improvements	49,927	49,927
Leasehold improvements	50,838	50,192
Furniture and fixtures	25,658	27,119
Construction in progress	653	1,353
	1,004,926	1,007,839
Less: Accumulated depreciation and amortization	(721,342)	(708,299)
Total property and equipment, net	\$ 283,584	\$ 299,540



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

	April 30, 2016	January 30, 2016
<b>Other non-current assets:</b>		
Technology and other licenses	\$ 46,078	\$ 48,770
Deferred tax assets	36,981	34,505
Investments in privately-held companies	5,804	5,804
Prepaid land use rights	13,045	13,123
Deposits	51,566	51,512
Other	16,304	10,996
 Total other non-current assets	 \$ 169,778	 \$ 164,710

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

	April 30, 2016	January 30, 2016
<b>Accrued liabilities:</b>		
Accrued rebates	\$ 20,346	\$ 41,320
Accrued royalties	15,823	16,217
Technology license obligations	19,580	17,985
Accrued legal expense	8,218	9,761
Accrued litigation	3,350	3,830
Other	40,414	42,947
 Total accrued liabilities	 \$ 107,731	 \$ 132,060
	April 30, 2016	January 30, 2016
<b>Deferred income:</b>		
Net deferred revenue	\$ 76,412	\$ 77,935
Deferred cost of goods sold	(21,924)	(22,213)
 Deferred income	 \$ 54,488	 \$ 55,722
	April 30, 2016	January 30, 2016
<b>Other non-current liabilities:</b>		
Technology license obligations	\$ 8,508	\$ 12,461
Long-term accrued employee compensation	6,350	6,078
Other	7,700	8,424
 Other non-current liabilities	 \$ 22,558	 \$ 26,963

**Accumulated other comprehensive income (loss)**

The changes in accumulated other comprehensive income (loss) by components are presented in the following tables (in thousands):

	Unrealized Gain (Loss) on Marketable Securities	Unrealized Gain (Loss) on Auction Rate Securities	Unrealized Gain (Loss) on Cash Flow Hedges	Total
Balance at January 30, 2016	\$ (656)	\$	\$ (139)	\$ (795)
Other comprehensive income before reclassifications	2,317		527	2,844
Amounts reclassified from accumulated other comprehensive loss	116		57	173

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

Other comprehensive income	2,433		584	3,017
Balance at April 30, 2016	\$ 1,777	\$	\$ 445	\$ 2,222

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

	Unrealized Gain (Loss) on Marketable Securities	Unrealized Gain (Loss) on Auction Rate Securities	Unrealized Gain (Loss) on Cash Flow Hedges	Total
Balance at January 31, 2015	\$ 3,768	\$ (2,274)	\$ (1,186)	\$ 308
Other comprehensive income before reclassifications	(1,528)	(115)	803	(840)
Amounts reclassified from accumulated other comprehensive income (loss)	(332)		944	612
Other comprehensive income (loss)	(1,860)	(115)	1,747	(228)
Balance at May 2, 2015	\$ 1,908	\$ (2,389)	\$ 561	\$ 80

The amounts reclassified from accumulated other comprehensive income (loss) by components are presented in the following table (in thousands):

Affected Line Item in the Statement of Operations	Three Months Ended	
	April 30, 2016	May 2, 2015
Interest and other income, net:		
Available-for-sale securities:		
Marketable securities	\$ (116)	\$ 332
Cash flow hedges:		
Research and development	(51)	(864)
Selling and marketing	(1)	(67)
General and administrative	(5)	(13)
Total	\$ (173)	\$ (612)

**Consolidated Statement of Operations**

	Three Months Ended	
	April 30, 2016	May 2, 2015
<b>Interest and other income, net:</b>		
Interest income	\$ 3,442	\$ 4,077
Net realized gain on investments	164	336
Foreign currency exchange gain (loss)	(1,941)	407
Other income (loss)	(59)	567
Interest expense	(118)	(220)
	\$ 1,488	\$ 5,167



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

The Company reports both basic net income (loss) per share, which is based on the weighted average number of common shares outstanding during the period, and diluted net income (loss) per share, which is based on the weighted average number of common shares outstanding and potentially dilutive shares outstanding during the period. The computations of basic and diluted net income (loss) per share are presented in the following table (in thousands, except per share amounts):

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
<b>Numerator:</b>		
Net income (loss)	\$ (22,679)	\$ 14,090
<b>Denominator:</b>		
Weighted average shares basic	508,794	516,228
<b>Effect of dilutive securities:</b>		
Share-based awards		10,939
<b>Weighted average shares diluted</b>	<b>508,794</b>	<b>527,167</b>
<b>Net income (loss) per share:</b>		
Basic	\$ (0.04)	\$ 0.03
Diluted	\$ (0.04)	\$ 0.03

Potential dilutive securities include dilutive common shares from share-based awards attributable to the assumed exercise of stock options, restricted stock units and employee stock purchase plan shares using the treasury stock method. Under the treasury stock method, potential common shares outstanding are not included in the computation of diluted net income per share, if their effect is anti-dilutive.

Anti-dilutive potential shares are presented in the following table (in thousands):

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
<b>Weighted average shares outstanding:</b>		
Share-based awards	42,955	58,387

Anti-dilutive potential shares from share-based awards are excluded from the calculation of diluted earnings per share for all periods reported above because either their exercise price exceeded the average market price during the period or the share-based awards were determined to be anti-dilutive based on applying the treasury stock method. Anti-dilutive potential shares from share-based awards are also excluded from the calculation of diluted earnings per share for the three months ended April 30, 2016 due to the reported net loss.

**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 effect of currency fluctuations. The Company's policy is to enter into foreign currency forward contracts with maturities less than 12 months that mitigate the effect of rate fluctuations on certain local currency denominated operating expenses. All derivative

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

instruments 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.

The notional amounts of outstanding forward contracts were as follows (in thousands):

	Buy Contracts	
	April 30, 2016	January 31, 2016
Israeli shekel	\$ 11,301	\$ 19,082

*Cash Flow Hedges.* The Company designates and documents its foreign currency forward exchange contracts as cash flow hedges for certain operating expenses. 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.

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

*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 of foreign currency exchange contracts was not significant as of any period presented.

The following table provides information about gains (losses) associated with the Company's derivative financial instruments (in thousands):

	Location of Gains (Losses) in Statement of Operations	Amount of Gains (Losses) in Statement of Operations for the three months ended	
		April 30, 2016	May 2, 2015
Derivatives designated as cash flow hedges:			
Forward contracts:	Research and development	\$ 186	\$ (991)
	Selling and marketing	4	(77)
	General and administrative	22	(14)
		\$ 212	\$ (1,082)

The portion of gains (losses) excluded from the assessment of hedge effectiveness are included in interest and other income, net, and these amounts were not material in the three months ended April 30, 2016 and May 2, 2015. In addition, realized losses from forward contracts that are not designated as hedging instruments that are included in interest and other income, net, were not material in the three months ended April 30, 2016 and May 2, 2015. The Company also reports hedge ineffectiveness from derivative financial instruments in current earnings, which was not material in the three months ended April 30, 2016 and May 2, 2015. No cash flow hedges were terminated as a result of forecasted transactions that did not occur.

**Note 6. Fair Value Measurements**

Fair value is an exit price representing the amount that would be received in the sale of 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 accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

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

Level 2 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.



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

The Company's Level 1 assets include institutional money-market funds that are classified as cash equivalents and marketable investments in U.S. government and agency debt, which are valued primarily using quoted market prices. The Company's Level 2 assets include its marketable investments in time deposits, corporate debt securities, foreign government and agency debt, municipal debt securities and asset backed securities as the market inputs to value these instruments consist of market yields, reported trades and broker/dealer quotes, which are corroborated with observable market data. In addition, foreign currency forward contracts, and the severance pay fund are classified as Level 2 assets 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 as Level 3 assets because there are currently no active markets for the auction rate securities and consequently the Company is unable to obtain independent valuations from market sources. The auction rate securities are valued using a discounted cash flow model. Some of the inputs to the discounted cash flow model are unobservable in the market. The total amount of assets measured using Level 3 valuation methodologies represented 0.2% of total assets as of April 30, 2016.

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

The tables below set forth, by level, the Company's financial assets and liabilities that were accounted for at fair value. The tables do not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Fair Value Measurements at April 30, 2016			
	Level 1	Level 2	Level 3	Total
Items measured at fair value on a recurring basis:				
Assets				
Cash equivalents:				
Money market funds	\$ 12,398	\$	\$	\$ 12,398
Time deposits		136,733		136,733
U.S. government and agency debt	10,200			10,200
Corporate debt securities		5,796		5,796
Municipal debt securities		2,590		2,590
Short-term investments:				
U.S. government and agency debt	213,248			213,248
Corporate debt securities		477,130		477,130
Asset backed securities		50,439		50,439
Time deposits		50,000		50,000
Foreign government and agency debt		15,500		15,500
Municipal debt securities		28,701		28,701
Prepaid expenses and other current assets:				
Foreign currency forward contracts		404		404
Long-term investments:				
Auction rate securities			8,974	8,974
Other non-current assets:				
Severance pay fund		735		735
Total assets	\$ 235,846	\$ 768,028	\$ 8,974	\$ 1,012,848

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

	Fair Value Measurements at January 30, 2016			
	Level 1	Level 2	Level 3	Total
Items measured at fair value on a recurring basis:				
Assets				
Cash equivalents:				
Money market funds	\$ 160,400	\$	\$	\$ 160,400
Time deposits		209,405		209,405
U.S. government and agency debt	184,374			184,374
Corporate debt securities		54,689		54,689
Short-term investments:				
U.S. government and agency debt	317,405			317,405
Corporate debt securities		557,821		557,821
Asset backed securities		76,736		76,736
Foreign government and agency debt		21,358		21,358
Municipal debt securities		31,249		31,249
Prepaid expenses and other current assets:				
Foreign currency forward contracts		30		30
Long-term investments:				
Auction rate securities			11,296	11,296
Other non-current assets:				
Severance pay fund		678		678
Total assets	\$ 662,179	\$ 951,966	\$ 11,296	\$ 1,625,441
Liabilities				
Accrued liabilities:				
Foreign currency forward contracts	\$	\$ 195	\$	\$ 195

The following table summarizes the change in fair value for Level 3 assets (in thousands):

	Three Months Ended	
	April 30, 2016	May 2, 2015
Beginning balance	\$ 11,296	\$ 10,226
Sales and redemptions	(2,322)	
Unrealized losses included in accumulated other comprehensive income		(115)
Ending balance	\$ 8,974	\$ 10,111

**Note 7. Acquired Intangible Assets, Net**

The carrying amount of acquired intangible assets, net, are as follows (in thousands):

Range of Useful Lives	Gross Carrying	April 30, 2016 Accumulated Amortization	Net Carrying	Gross Carrying	January 30, 2016 Accumulated Amortization	Net Carrying
-----------------------	----------------	---	--------------	----------------	---	--------------

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

		Amounts	and Write-Offs	Amount	Amounts	and Write-Offs	Amounts
Purchased and core technology	4 - 8 years	\$ 35,498	\$ (23,463)	\$ 12,035	\$ 35,498	\$ (21,910)	\$ 13,588
Customer intangibles	5 - 7 years	28,600	(25,571)	3,029	28,600	(24,178)	4,422
Total intangible assets, net		\$ 64,098	\$ (49,034)	\$ 15,064	\$ 64,098	\$ (46,088)	\$ 18,010

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

Based on the identified intangible assets recorded at April 30, 2016, the future amortization expense of identified intangible assets for the next five fiscal years is as follows (in thousands):

<b>Fiscal Year</b>	
Remainder of fiscal 2017	\$ 7,696
2018	5,508
2019	1,860
2020 and thereafter	
	\$ 15,064

**Note 8. Restructuring and Other Related Charges**

The following table provides detail of restructuring and other related charges as presented in the unaudited condensed consolidated statements of operations related to the restructuring actions described below (in thousands):

	<b>Three Months Ended</b>	
	<b>April 30,</b>	<b>May 2,</b>
	<b>2016</b>	<b>2015</b>
Facilities and related costs	\$ 3,631	\$ 19
Release of reserves:		
Severance	(86)	
	3,545	19
Impairment loss and write-off of assets:		
Equipment	896	573
Restructuring and other related charges	\$ 4,441	\$ 592

The Company recorded a total \$4.4 million in the three months ended April 30, 2016, respectively, in connection with restructuring and other related charges as described in the following paragraphs:

In connection with the Company's decision to further reduce its research and development operations in Israel announced in May 2015, the Company and the landlord of its facility located in Israel reached agreement for the Company to completely vacate and release certain floors back to the landlord for purposes of future sublease. As a result, the Company recorded a \$3.6 million charge for the remaining lease obligation, net of estimated sublease income, associated with those floors it vacated.

In connection with the restructuring of its mobile platform business announced in September 2015, the Company also recorded net charges of \$0.8 million, primarily for the write off of certain mobile-related equipment it originally identified as held for sale since it was unable to locate a buyer. Of the remaining actions that were expected to be completed in the first half of fiscal 2017 related to restructuring of the mobile platform business, substantially all of the activities were completed by the end of April 2016. Total cumulative charges recorded in fiscal 2016 through the three months ended April 30, 2016 related to this restructuring action were \$45.3 million, which included \$28.1 million of severance benefits, a \$1.6 million loss on early contract termination, \$7.6 million for impairment of technology licenses and certain equipment, and a \$8.0 million write down of inventory.



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

The following table sets forth a reconciliation of the beginning and ending restructuring liability balances by each major type of costs associated with the restructuring charges (in thousands):

	Severance and Related Costs	Facilities and Related Costs	Other Exit-Related Costs	Total
Balance at January 30, 2016	\$ 1,155	\$ 1,043	\$ 1,644	\$ 3,842
Restructuring charges		3,631		3,631
Net cash payments	(825)	(839)	(200)	(1,864)
Release of reserves	(86)			(86)
Exchange rate adjustment	8	95		103
Balance at April 30, 2016	\$ 252	\$ 3,930	\$ 1,444	\$ 5,626

The balance at April 30, 2016 for facilities and related costs includes remaining payments under lease obligations related to vacated space that are expected to be paid through fiscal 2019.

**Note 9. Income Tax**

The income tax benefit for the three months ended April 30, 2016 included the current income tax benefit of \$2.7 million, a deferred tax benefit of \$2.5 million for the portion of a payment to the Company's former Chief Executive Officer that became deductible after his departure from the Company in April 2016, offset by a net increase in unrecognized tax benefits of \$0.2 million. The net increase in unrecognized tax benefits arose from penalties and interest of \$0.7 million accrued on the outstanding unrecognized tax benefit balance, partially offset by the release of \$0.5 million due to expiration of the statute of limitations in a non-U.S. jurisdiction.

The income tax provision for the three months ended May 2, 2015 included the current income tax liability of \$4.3 million, plus an additional provision of \$3.1 million related to a \$15.4 million payment to the Company's former Chief Executive Officer, which were offset by a net reduction in unrecognized tax benefits of \$3.1 million. The net reduction in unrecognized tax benefits arose from the release of \$4.0 million due to the expiration of the statute of limitations in a non-U.S. jurisdiction, which was partially offset by penalties and interest of \$0.9 million accrued on the outstanding unrecognized tax benefit balance.

It is reasonably possible that the amount of unrecognized tax benefits could increase or decrease significantly due to changes in tax law in various jurisdictions, new tax audits and changes in the U.S. dollar as compared to foreign currencies within the next 12 months. Excluding these factors, uncertain tax positions may decrease by as much as \$16.3 million from the lapse of statutes of limitation in various jurisdictions during the next 12 months. Government tax authorities from several non-U.S. jurisdictions are also examining the Company's tax returns. The Company believes that it has adequately provided for any reasonably foreseeable outcomes related to its tax audits and that any settlement will not have a material effect on its results at this time.

The Company operates under tax incentives in certain countries, which may be extended if certain additional requirements are satisfied. The tax incentives are conditional upon meeting certain employment and investment thresholds. The impact of these tax incentives decreased foreign taxes by \$0.9 million and \$3.3 million in the three months ended April 30, 2016 and May 2, 2015, respectively. The benefit of the tax incentives on net income per share was less than \$0.01 per share for the three months ended April 30, 2016 and \$0.01 per share for the three months ended May 2, 2015.

The Company's principal source of liquidity as of April 30, 2016 consisted of approximately \$1.6 billion of cash, cash equivalents and short-term investments, of which approximately \$760 million was held by foreign subsidiaries (outside Bermuda). Approximately \$570 million of this amount held by foreign subsidiaries is related to undistributed earnings, which have been indefinitely reinvested outside of Bermuda. These funds are primarily held in China, Israel, the United States and Switzerland. The Company plans to use such amounts to fund various

activities outside of Bermuda including working capital requirements, capital expenditures for expansion, funding of future acquisitions, or other financing activities. If such funds were needed by the parent company in Bermuda or if the amounts were otherwise no longer considered indefinitely reinvested, the Company would incur a tax expense of approximately \$175 million.

**Note 10. Commitments and Contingencies**

***Purchase Commitments***

Under the Company's manufacturing relationships with its foundry partners, cancellation of all outstanding purchase orders are allowed but require payment of all costs and expenses incurred through the date of cancellation. As of April 30, 2016, these foundries had incurred approximately \$168.5 million of manufacturing costs and expenses relating to the Company's outstanding purchase orders.



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

***Contingencies***

The Company and certain of its subsidiaries are currently parties to various legal proceedings, including those noted in this section. The legal proceedings and claims described below could result in substantial costs and could divert the attention and resources of the Company's management. The Company is also engaged in other legal proceedings and claims not described below, which arise in the ordinary course of its business. Litigation is subject to inherent uncertainties and unfavorable rulings could occur. An unfavorable ruling in litigation could require the Company to pay damages, one-time license fees or ongoing royalty payments, and 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, any of which could adversely affect financial results in future periods. The Company believes that its products do not infringe valid and enforceable claims and it will continue to vigorously defend against the allegations in these matters. However, 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.

As of April 30, 2016, the Company has an accrued litigation balance of \$3.4 million related to certain legal proceedings in the section described below. Unless otherwise stated, the Company is currently unable to predict the final outcome of these lawsuits and therefore cannot determine the likelihood of loss nor estimate a range of possible loss.

*Carnegie Mellon University Litigation.* On March 6, 2009, CMU filed a complaint in the U.S. District Court for the Western District of Pennsylvania ( W.D. of Pennsylvania ). CMU has asserted U.S. Patent Nos. 6,201,839 and 6,438,180 (collectively, the CMU patents in suit ), which relate to read-channel integrated circuit devices and the hard disk drive ( HDD ) incorporating such devices. A jury trial began on November 26, 2012. On December 26, 2012, a jury delivered a verdict that found the CMU patents in suit were literally and willfully infringed and valid, and awarded past damages in the amount of \$1.17 billion. Based on post-trial motions and decisions, the W.D. of Pennsylvania calculated the damages including enhancement to total approximately \$1.54 billion, and held that, under its decision, CMU is entitled to post judgment interest and an ongoing royalty. On May 7, 2014, the W.D. of Pennsylvania entered final judgment, from which the Company filed a notice of appeal on May 14, 2014. On August 4, 2015, the W.D. of Pennsylvania in a three-judge panel issued an opinion affirming in part, reversing in part, and vacating and remanding in part. On February 16, 2016, the Company and CMU entered into a Settlement Agreement and Patent License pursuant to which the Company has agreed to pay an aggregate of \$750 million, without any ongoing royalty payments, to CMU and the parties have agreed to mutually acceptable release, license and covenant not to sue provisions. Please see Note 13 Carnegie Mellon University Settlement for additional information on the effect of the settlement. The Company expects the action to be finally dismissed in the third quarter of fiscal 2017, approximately 6 months after payment of the full amount of the settlement payment. In connection with the settlement, the primary supersedeas bond that the Company entered into in connection with this litigation was reduced to \$439 million and the secondary bond, which is secured, was adjusted to \$311 million. All of the Company's obligations under both bonds were discharged pursuant to an order releasing supersedeas bonds on April 21, 2016. Any bond specific indemnity agreement will be terminated and released upon final dismissal of the action.

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

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

On May 4, 2010, Marvell Semiconductor, Inc. ( MSI ) filed a motion to intervene in the USEI litigation, which was granted on May 19, 2010. On July 13, 2010, the E.D. of Texas issued an order granting the defendants motion to transfer the action to the U.S. District Court for the Northern District of California ( N.D. of California ); the case was formally transferred on August 23, 2010. On

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

September 14, 2011, USEI withdrew its allegations against MSI for the 459 patent. On August 16, 2013, the N.D. of California granted defendants' summary judgment motion to preclude the plaintiff from recovering certain pre-suit damages. On November 7, 2014, on summary judgment, the N.D. of California found that all the patents-in-suit were either invalid or not infringed. On December 1, 2014, the N.D. of California entered a judgment in favor of defendants and awarded defendants' costs. On December 29, 2014, USEI filed a motion to alter or amend the N.D. of California's summary judgment order, which the N.D. of California denied on March 31, 2015. On April 24, 2015, USEI filed its notice of appeal. On April 25, 2016, the Federal Circuit affirmed the N.D. of California's judgment in favor of MSI. On June 29, 2016, the Federal Circuit denied USEI's petition for rehearing.

*Innovatio Litigation.* On March 16, 2015, Innovatio IP Ventures, LLC filed suit against MSI in the U.S. District Court for the Northern District of Illinois, alleging infringement of U.S. Patent Nos. 6,697,415; 5,844,893; 5,740,366; 7,916,747; 6,665,536; 7,013,138; 7,107,052; 5,546,397; 7,710,907; 7,710,935; 6,714,559; 7,457,646; and 6,374,311, purportedly related to certain wireless technology. The complaint seeks unspecified damages.

*Luna Litigation and Consolidated Cases.* On September 11, 2015, Daniel Luna filed an action asserting putative class action claims on behalf of the Company's shareholders in the United States District Court for the Southern District of New York (S.D. of New York). This action was consolidated with two additional, nearly identical complaints subsequently filed by Philip Limbacher and Jim Farno. The complaints asserted violations of federal securities laws based on allegations that the Company and certain of its officers and directors (Sehat Sutardja, Michael Rashkin, and Sukhi Nagesh) made, caused to be made, or failed to correct false and/or misleading statements in the Company's press releases and public filings. The complaints request damages in unspecified amounts, costs and fees of bringing the action, and other unspecified relief.

On November 18, 2015, the S.D. of New York granted the Company's motion to transfer the consolidated cases to the N.D. of California. On December 21, 2015, the N.D. of California granted the Company's motion to deem the consolidated cases related to the Saratoga litigation, discussed below. On February 8, 2016, the N.D. of California granted an unopposed motion to appoint Plumbers and Pipefitters National Pension Fund as Lead Plaintiff. On March 19, 2016, Lead Plaintiff filed a consolidated amended complaint. On April 29, 2016, Marvell and each of the individual defendants each filed motions to dismiss. The hearing on the motions to dismiss took place on July 29, 2016 and the court took the matter under submission.

*Saratoga Litigation.* On October 16, 2015, Saratoga Advantage Trust Technology & Communications Portfolio (Saratoga) filed an action asserting shareholder derivative claims ostensibly on behalf of the Company in the Superior Court of the State of California, County of Santa Clara. The complaint names eight current or former officers and/or directors (Sehat Sutardja, Weili Dai, Juergen Gromer, Arturo Krueger, John Kassakian, Randhir Thakur, Michael Rashkin, and Sukhi Nagesh) as defendants and asserts various California state law causes of action based on allegations that the Company and the named officers and directors made, caused to be made, or failed to correct false and/or misleading statements in the Company's press releases and public filings, leading to the filing of securities class actions that allegedly damaged the Company. The Company was named as a nominal defendant. The complaint requests damages and restitution in unspecified amounts, equitable and/or injunctive relief, costs and fees of bringing the action, and other unspecified relief.

On October 23, 2015, the Company removed the action to the N.D. of California. On December 21, 2015, the N.D. of California denied Saratoga's motion to remand. On December 21, 2015, the N.D. of California granted the Company's motion to deem the action related to the consolidated Luna actions, discussed above. On January 22, 2016, the Company filed a motion to dismiss the complaint; on March 25, 2016, the N.D. of California held a hearing on the motion and took the matter under submission. To the Company's knowledge, none of the individual defendants has yet been served.

***Surety Bonds***

On May 14, 2014, the Company filed a Notice of Appeal to appeal the final judgment issued by the W.D. of Pennsylvania in the CMU litigation. In order to stay the execution of the final judgment pending its appeal, the Company filed a supersedeas bond for \$1.54 billion with the W.D. of Pennsylvania in the event the Company did not fully satisfy a final judgment as affirmed after the completion of all appellate proceedings. The bond was issued by a consortium of sureties authorized by the U.S. Treasury. In support of the bond, the Company entered into separate indemnity agreements with each of the sureties to indemnify the sureties from all costs and payments made under the bond. The indemnity agreements did not require collateral to be posted at the time of the issuance of the bond. However, the indemnity agreements provide that each

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

of the sureties have the right to demand to be placed in funds or call for collateral under pre-defined events.

On November 14, 2014, the Company filed a second surety bond for \$216 million and filed a commitment letter from the sureties to issue up to an additional \$95 million in bonding under certain conditions. The second bond and commitment are secured by the Company's campus located in Santa Clara, California, which has a carrying value of \$131.4 million at April 30, 2016.

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

In connection with the settlement that was reached with CMU for a total \$750 million in February 2016, the primary supersedeas bond that the Company entered into was reduced to \$439 million and the secondary bond was adjusted to \$311 million and both were discharged pursuant to an order releasing supersedeas bonds on April 21, 2016. The underlying indemnity agreements will terminate upon the final dismissal of the case which the Company expects will occur in the third quarter of fiscal 2017. For additional information, see CMU litigation under Contingencies above.

***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 may 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 for general commercial obligations, 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. Some 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. In general, the Company does not record any liability for these indemnities, commitments and guarantees in the accompanying consolidated balance sheets as the amounts cannot be reasonably estimated and are not considered probable. 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 11. Shareholders' Equity*****Stock Plans***

Stock option activity under the Company's stock option and stock incentive plans is included in the following table (in thousands, except per share amounts):

	Time-Based Options		Market-Based Options		Total	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Balance at January 30, 2016	40,874	\$ 13.59	2,156	\$ 15.43	43,030	\$ 13.68
Granted	1,881	\$ 9.78			1,881	\$ 9.78
Exercised	(45)	\$ 7.00			(45)	\$ 7.00
Canceled/Forfeited	(1,849)	\$ 22.90	(2,156)	\$ 15.43	(4,005)	\$ 18.88
Balance at April 30, 2016	40,861	\$ 13.00			40,861	\$ 13.00
Vested or expected to vest at April 30, 2016	38,788	\$ 12.99				
Exercisable at April 30, 2016	24,777	\$ 12.98				

For time-based stock options vested and expected to vest at April 30, 2016, the aggregate intrinsic value was \$10.9 million and the weighted average remaining contractual term was 5.8 years. For time-based stock options exercisable at April 30, 2016, the aggregate intrinsic value was \$10.3 million and the weighted average remaining contractual term was 4.5 years. The aggregate intrinsic value of stock options exercised during the three months ended April 30, 2016 and May 2, 2015 was \$0.1 million and \$6.3 million, respectively. The market-based stock options

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

automatically expired in April 2016 since the market price conditions were not met within the required five years from date of grant. The Company's closing stock price of \$9.98 as reported on the NASDAQ Global Select Market for all in-the-money options as of April 29, 2016 was used to calculate the aggregate intrinsic value.

As of April 30, 2016, the unamortized compensation expense for time-based stock options was \$36.2 million and market-based stock options were fully amortized in fiscal 2014. The unamortized compensation expense for time-based stock options will be amortized on a straight-line basis and is expected to be recognized over a weighted average period of 2.1 years.

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

Activity related to the non-vested portion of the restricted stock units is included in the following table (in thousands, except for share prices):

	Time-Based		Performance-Based		Market-Based		Total	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Balance at January 30, 2016	8,343	\$ 13.57	977	\$ 14.43	353	\$ 12.24	9,673	\$ 13.61
Granted	7,394	\$ 9.43					7,394	\$ 9.43
Vested	(4,946)	\$ 14.16	(155)	\$ 14.15			(5,101)	\$ 14.16
Canceled/Forfeited	(218)	\$ 12.85	(822)	\$ 14.49	(299)	\$ 12.24	(1,339)	\$ 13.72
Balance at April 30, 2016	10,573	\$ 10.41			54	\$ 12.24	10,627	\$ 10.42

In connection with the performance-based equity awards granted in fiscal 2016 to each of the Company's executive officers, a total of 33,616 shares vested on April 1, 2016 based on achieving certain individual strategic goals as evaluated by the Executive Compensation Committee of the Company's Board of Directors. No shares vested for the achievement of financial performance goals since the financial performance criteria were below the threshold level. The amount of canceled shares reported in the table above includes the unvested shares that were not earned.

The Company recognizes expense from performance-based equity awards when it becomes probable that the performance conditions will be met. Once it becomes probable that a performance-based award will vest, the Company recognizes share-based compensation expense equal to the number of shares expected to vest multiplied by the fair value of the award at the grant date, which is amortized using the accelerated method.

The aggregate intrinsic value of restricted stock units expected to vest as of April 30, 2016 was \$95.1 million. The number of restricted stock units that are expected to vest is 9.5 million shares. As of April 30, 2016, unamortized compensation expense related to restricted stock units was \$93.6 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 1.8 years.

**Employee Stock Purchase Plan**

During the three months ended April 30, 2016 and May 2, 2015, the Company issued no shares under the 2000 Employee Stock Purchase Plan, as amended and restated (the ESPP). As of April 30, 2016, there was \$38.4 million of unrecognized compensation cost related to the ESPP.

**Share Repurchase Program**

There were no share repurchases during the three months ended April 30, 2016. The Company repurchased 1.4 million of its common shares for \$22.1 million during the three months ended May 2, 2015. The repurchased shares were retired immediately after the repurchases were completed. The Company records all repurchases, as well as investment purchases and sales, based on trade date. As of April 30, 2016, a total of 241.6 million shares have been repurchased to date under the Company's share repurchase program for a total \$3.1 billion in cash and there was \$182.6 million remaining available for future share repurchases. The Company has made no subsequent share repurchases since its third quarter of fiscal 2016.

**Dividends**

The Company paid the following cash dividends:

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

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
Cash dividend per share	\$ 0.06	\$ 0.06
Total payment to shareholders (in thousands)	\$ 30,461	\$ 30,910

Future payment of a regular quarterly cash dividend on the Company's common shares will be subject to, among other things, the best interests of the Company and its shareholders, the Company's results of operations, cash balances and future cash requirements, financial condition, statutory requirements under Bermuda law and other factors that the Company's board of directors



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

may deem relevant. The Company's dividend payments may change from time to time, and the Company cannot provide assurance that it will continue to declare dividends at all or in any particular amounts. In addition, developments in ongoing litigation could affect the Company's ability to make a dividend payment on a declared payment date until such time as the Company can meet statutory requirements under Bermuda law.

On May 18, 2016, the Company announced that its board of directors declared a cash dividend of \$0.06 per share paid on July 12, 2016 to shareholders of record as of June 14, 2016.

**Note 12. Share-Based Compensation**

The following table presents details of share-based compensation expenses by functional line item (in thousands):

	<b>Three Months Ended</b>	
	<b>April 30,</b>	<b>May 2,</b>
	<b>2016</b>	<b>2015</b>
Cost of goods sold	\$ 1,802	\$ 1,547
Research and development	24,396	24,781
Selling and marketing	2,942	2,577
General and administrative	(4,687)	4,316
	<b>\$ 24,453</b>	<b>\$ 33,221</b>

Upon the termination of certain members of our executive management in April 2016, it was determined that the vesting in certain of their unvested stock awards was not probable. As a result, the Company recorded a \$6.9 million reversal of the previously recognized related share-based compensation expense in the first quarter of fiscal 2017. Share-based compensation capitalized in inventory was \$1.8 million at April 30, 2016 and \$1.5 million at January 30, 2016.

**Valuation Assumptions**

The following weighted average assumptions were used for each respective period to calculate the fair value of each time-based equity award on the date of grant using the Black-Scholes option pricing model:

	<b>Three Months Ended</b>	
	<b>April 30,</b>	<b>May 2,</b>
	<b>2016</b>	<b>2015</b>
<b>Time-based Stock Options:</b>		
Weighted average fair value	\$ 2.87	\$ 4.54
Expected volatility	40%	34%
Expected term (in years)	5.2	5.4
Risk-free interest rate	1.3%	1.5%
Expected dividend yield	2.5%	1.6%

Under the ESPP, there were no stock purchase rights granted in the three months ended April 30, 2016 and May 2, 2015.

**Note 13. Carnegie Mellon University Settlement**

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

In February 2016, the Company and CMU settled their patent infringement lawsuit pursuant to a court-ordered mediation and entered into a Settlement Agreement and Patent License (the Agreement). The parties agreed to mutual release of claims, license and covenant not to sue provisions for which the Company paid an aggregate of \$750 million to CMU in the three months ended April 30, 2016. See CMU litigation under Note 10 Commitments and Contingencies for further information about the lawsuit.

The Agreement was accounted for as a multiple-element arrangement and accordingly, a valuation was completed to determine the estimated fair value of each identifiable element. As a result, the Company allocated \$654.7 million to the mutual release of claims and covenant not to sue provisions; \$81.3 million to the licensing of intellectual property in fiscal 2016; and the remaining \$14.0 million representing the future use of the license through April 2018.

**Table of Contents**

**MARVELL TECHNOLOGY GROUP LTD.**

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

The \$654.7 million for the mutual release of claims and covenant not to sue was recorded in fiscal 2016 as a settlement charge in operating expenses since there is no future benefit. The \$81.3 million license fee was recorded in fiscal 2016 as a charge in cost of goods sold for past use of the license. The \$14.0 million representing the future use of the license, is to be recognized in cost of goods sold over the remaining term of the license from February 2016 through April 2018. Accordingly, the Company recorded \$1.6 million to cost of goods sold in the three months ended April 30, 2016.

The Company considered its existing cash, cash equivalents and short-term investments was sufficient to cover payment of the \$750 million settlement, and in April 2016, the Company completed full payment of the \$750 million to CMU.

**Note 14. Changes in the Company's Organization**

In April 2016, the employment of Dr. Sehat Sutardja as Chief Executive Officer and Weili Dai as President was terminated by the Company's Board of Directors. Dr. Sutardja and Ms. Dai remain on the Board of Directors at this time. The Board of Directors then formed an Interim Office of the Chief Executive and appointed Maya Strelar-Migotti, Executive Vice President of the Smart Networked Devices and Solutions Business Group, and Dr. Pantelis Alexopoulos, Executive Vice President of the Storage Business Group, as Interim Co-Chief Executive Officers, each having the authority to exercise all powers of the Chief Executive Officer.

Also in April 2016, the Company announced that it entered into an agreement with Starboard Value LP (Starboard), regarding the composition of its Board of Directors. Under the terms of the agreement, the Company elected Peter A. Feld, Richard S. Hill, Oleg Khaykin, Michael Strachan and Robert Switz to serve on its board. The agreement specifies that the Board will recommend and the Company will support and solicit proxies only for the election at the 2016 annual general meeting of Messrs. Feld, Hill, Khaykin, Murphy, Strachan and Switz and the four independent directors serving on the Board immediately prior to the execution of the agreement, Dr. Juergen Gromer, Dr. John G. Kassakian, Arturo Krueger and Dr. Randhir Thakur.

In May 2016, Mr. Hill replaced Dr. Sutardja as the Chairman of the Board. In June 2016, the Board of Directors appointed Matthew J. Murphy to serve as the Company's President and Chief Executive Officer, effective July 11, 2016. Ms. Strelar-Migotti and Dr. Alexopoulos returned to their roles as Executive Vice Presidents of the Company effective upon Mr. Murphy's commencement of employment.

Upon the commencement of Mr. Murphy's employment, the Board subsequently appointed Richard S. Hill, the Chairman of the Board, as the Company's Interim Principal Executive Officer, to serve in that capacity until the Company files its Quarterly Report on Form 10-Q for the second quarter of fiscal 2017 (Q217 Form 10-Q). Mr. Murphy will assume the role of the Company's principal executive officer immediately following the filing of the Q217 Form 10-Q. Mr. Murphy also joined the Board of Directors on July 11, 2016.

## **Table of Contents**

### **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

*This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), which are subject to the safe harbor created by those sections. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results to differ materially from those implied by the forward-looking statements. Words such as anticipates, expects, intends, plans, projects, believes, seeks, estimates, may, can, will, would and similar expressions identify such forward-looking statements.*

*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:*

*our dependence upon the hard disk drive and wireless markets, which are highly cyclical and intensely competitive;*

*the outcome of pending or future litigation and legal proceedings;*

*our dependence on a small number of customers;*

*our ability and the ability of our customers to successfully compete in the markets in which we serve;*

*our reliance on independent foundries and subcontractors for the manufacture, assembly and testing of our products;*

*our ability and our customers' ability to develop new and enhance products and the adoption of those products in the market;*

*decreases in our gross margin and results of operations in the future due to a number of factors;*

*our ability to estimate customer demand and future sales accurately;*

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

*the impact of international conflict and continued economic volatility in either domestic or foreign markets;*

*the effects of transitioning to smaller geometry process technologies;*

*the risks associated with manufacturing and selling a majority of our products and our customers' products outside of the United States;*

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

*the impact of any change in our application of the United States federal income tax laws and the loss of any beneficial tax treatment that we currently enjoy;*

*the effects of any potential acquisitions or investments;*

*our ability to protect our intellectual property;*

*the impact and costs associated with changes in international financial and regulatory conditions; and*

*our maintenance of an effective system of internal controls.*

*Additional factors which could cause actual results to differ materially include those set forth in the following discussion, as well as the risks discussed in Part II, Item 1A, Risk Factors, and other sections of this Quarterly Report on Form 10-Q. These forward-looking statements speak only as of the date hereof. Unless required by law, we undertake no obligation to update any forward-looking statements.*

### **Overview**

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

## Table of Contents

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. As a fabless integrated circuit company, 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.

In the first quarter of fiscal 2017, we saw revenue decline by 12% sequentially from the fourth quarter of fiscal 2016, mainly due to normal seasonal weakness compounded by a decline in the HDD market and the previously anticipated drop off in our mobile and wireless sales as a result of the Company's decision to exit the mobile handset platform business. Despite the aforementioned declines, sales of our networking and solid state drive (SSD) products increased in the first quarter of fiscal 2017 and partially offset weakness in other areas. Revenue for the first quarter of fiscal 2017 declined 25% on a year-over-year basis compared to the first quarter of fiscal 2016, which was mainly driven by a decline in the HDD market, soft demand for our networking products, and the anticipated decline in our mobile and wireless sales as a result of restructuring the mobile handset platform business. There was also no effect on revenue for the first quarter of fiscal 2017 related to pull-in transactions since our policy is not to engage in such transactions beginning in fiscal 2017.

In the storage market, our HDD SoC revenues were negatively affected by continued pressure on overall HDD industry builds, which is correlated with a persistently weak PC demand environment. The HDD decline was partially offset by growth in SSD controller sales, which was driven by improved demand for SSDs. We continue to invest in comprehensive solutions that build upon our leading position in the storage market.

In the networking market, sales of our networking solutions grew sequentially in the first quarter of fiscal 2017 compared to the fourth quarter of fiscal 2016 due to increased demand for enterprise and datacenter applications. In fiscal 2016, we focused our engineering and marketing efforts to our core networking technologies for Ethernet switches, PHYs and embedded networking processors. These efforts enable us to address growth opportunities in cloud data center, enterprise and carrier migration towards infrastructure with higher bandwidths and speed, as well as opportunities that arise from our investment in 5G network products. These efforts have started to manifest in a number of new designs that will enable growth of our networking revenues and improve our market share.

In the wireless connectivity market, our wireless connectivity revenues declined in the first quarter of fiscal 2017 given sales for handset-oriented wireless connectivity combo chips were unfavorably affected by our decision to restructure the mobile platform business announced in September 2015. The decline in the mobile handset-related business was partially offset by increased demand from gaming and multimedia applications. We continue to see greater demand and growth opportunities in enterprise access points, gaming and set top box/streaming devices with our new generation of WiFi solutions. We believe the increased bandwidth of our new solutions with advanced signal processing and location capabilities will enable a significant upgrade cycle in enterprise, service provider and connected home appliances.

In the mobile market, sales of our mobile solutions, which include our integrated applications processor/baseband modem solutions, declined due to the anticipated drop off from restructuring our mobile handset platform business. We entered the final phases of restructuring this business and anticipate the ramp down in revenues to continue through fiscal 2017.

We believe our financial position is strong and we remain committed to deliver shareholder value through our share repurchase and dividend programs. Our cash, cash equivalents and short-term investments were \$1.6 billion at April 30, 2016. We used cash flow from operations of \$609.6 million during the first quarter of fiscal 2017. We also paid cash dividends of \$0.06 per share for a total of \$30.5 million in the first quarter of fiscal 2017. In May 2016, we announced a dividend of \$0.06 per share that was paid in the second quarter of fiscal 2017.

Historically, a relatively small number of customers have accounted for a significant portion of our net revenue. Net revenue was 17% from one customer and 11% from a second customer for the three months ended April 30, 2016. Net revenue was 20% from one customer, 14% from a second customer and 10% from a third customer for the three months ended May 2, 2015. We also had net revenue from one distributor representing 11% and 12% for the three months ended April 30, 2016 and May 2, 2015, respectively. We continuously monitor the creditworthiness of our distributors and believe these distributors' sales to diverse end customers and geographies further serve to mitigate our exposure to credit risk.

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

Most of our sales are made to customers located outside of the United States, primarily in Asia. Sales to customers located in Asia represented 94% and 95% of our net revenue for the three months ended April 30, 2016 and May 2, 2015, respectively. Because many manufacturers and manufacturing subcontractors of our customers are located in Asia, we expect that most of our net revenue will continue to be represented by sales to our customers in that region.

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

**Table of Contents**

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.

**Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted 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. Actual results could differ from these estimates, and such differences could affect the results of operations reported in future periods. For a description of our critical accounting policies and estimates, please refer to the Critical Accounting Policies and Estimates section of our Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended January 30, 2016.

**Results of Operations**

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

	<b>Three Months Ended</b>	
	<b>April 30, 2016</b>	<b>May 2, 2015</b>
Net revenue	100.0%	100.0%
Operating costs and expenses:		
Cost of goods sold	47.9	48.5
Research and development	44.5	38.7
Selling and marketing	5.8	5.0
General and administrative	5.9	5.6
Restructuring and other related charges	0.8	0.1
Amortization of acquired intangible assets	0.5	0.3
<b>Total operating costs and expenses</b>	<b>105.4</b>	<b>98.2</b>
Operating income (loss)	(5.4)	1.8
Interest and other income, net	0.3	0.7
Income (loss) before income taxes	(5.1)	2.5
Provision (benefit) for income taxes	(0.9)	0.6
Net income (loss)	(4.2)%	1.9%

**Three months ended April 30, 2016 and May 2, 2015***Net Revenue*

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
Net revenue	\$ 540,822	\$ 724,288	(25.3)%

Net revenue for the three months ended April 30, 2016 decreased by \$183.5 million compared to the three months ended May 2, 2015 due to overall lower sales of products to customers, as we experienced a decline in demand from certain key customers in the storage end market combined with expected lower sales of products in our mobile end market, where we have undertaken a significant restructuring as announced in September 2015. Unit shipments were 30% lower while weighted average selling prices increased 8% in the three months ended April 30, 2016,



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

compared to the three months ended May 2, 2015, for an overall decline of 25%.

From time to time prior to fiscal 2017, our customers agreed to take shipments in an earlier fiscal quarter than the fiscal quarter they originally requested delivery. When such agreement would not have occurred but for the request made by Marvell, we refer to such transactions internally as pull-ins. Beginning in fiscal 2017, our policy is not to engage in pull-in transactions and, as a result, there were no such transactions in the first quarter of fiscal 2017. Net revenue related to pull-in sales for shipments taken early by our customers were approximately 9% of net revenue in the first quarter of fiscal 2016.

**Table of Contents***Cost of Goods Sold*

	Three Months Ended		% Change
	April 30, 2016	May 2, 2015	
Cost of goods sold	\$ 259,210	\$ 351,153	(26.2)%
% of net revenue	47.9%	48.5%	

Cost of goods sold as a percentage of net revenue was lower for the three months ended April 30, 2016 primarily due to overall lower net revenue. Cost of goods sold as a percentage of net revenue was lower due to improvement in the mix of products, as revenue from our mobile and wireless products, which have a higher average cost of goods sold as a percentage of revenue, continued to decline. Our cost of goods sold as a percentage of net 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; product warranty costs; changes in commodity prices such as gold; and the margin profiles of our new product introductions.

*Share-Based Compensation Expense*

	Three Months Ended	
	April 30, 2016	May 2, 2015
Cost of goods sold	\$ 1,802	\$ 1,547
Research and development	24,396	24,781
Selling and marketing	2,942	2,577
General and administrative	(4,687)	4,316
	\$ 24,453	\$ 33,221

Share-based compensation expense decreased by \$8.8 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015. The decrease is attributable to lower headcount due to the restructuring of the mobile platform business in September 2015, combined with the effect from a \$6.9 million reversal of previously recognized expense associated with unvested stock awards for which vesting was determined as not probable upon the termination in April 2016 of certain members of our executive management. These decreases were partially offset by an increase in expense associated with the employee stock purchase plan from the effect of a reset of the offering price in December 2015.

*Restructuring and other related charges*

	Three Months Ended	
	April 30, 2016	May 2, 2015
Restructuring and other related charges	\$ 4,441	\$ 592

We recorded a total of \$4.4 million in restructuring charges in the three months ended April 30, 2016 primarily related to the vacating of certain floors of our facility in Israel, for which we recorded a \$3.6 million charge for the remaining lease obligation, net of estimated sublease income, associated with those floors. There were no other significant activities that occurred in the three months ended April 30, 2016. See Note 8 Restructuring and Other Related Charges in the Notes to the Unaudited Condensed Consolidated Financial Statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q for further discussion.



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

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
Research and development	\$ 240,458	\$ 280,114	(14.2)%
% of net revenue	44.5%	38.7%	

Research and development expense decreased by \$39.7 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015. The decrease was attributable to \$26.2 million of lower personnel-related costs due to headcount reduction for which a large part was from the restructuring of our mobile platform business announced in September 2015, which has substantially been completed. As a result, we anticipate total annual cost savings of approximately \$130 million in lower research and development expenses for fiscal 2017. The decrease also reflects \$5.6 million of lower spending for third-party vendor and non-recurring engineering services, and a reduction in depreciation and amortization expense of \$4.1 million as certain equipment has become fully amortized.

*Selling and Marketing*

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
Selling and marketing	\$ 31,379	\$ 36,174	(13.3)%
% of net revenue	5.8%	5.0%	

Selling and marketing expense decreased by \$4.8 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015. The decrease was attributable to a decrease of \$4.5 million for certain marketing advertisement costs that were incurred due to a special program combined with \$0.5 million of lower personnel-related costs due to headcount reduction from the restructuring of our mobile platform business announced in September 2015.

*General and Administrative*

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
General and administrative	\$ 31,995	\$ 40,435	(20.9)%
% of net revenue	5.9%	5.6%	

General and administrative expense decreased by \$8.4 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015. The decrease reflects the effect of a \$15.4 million charge for a cash payment to our former Chief Executive Officer approved by the Company's Executive Compensation Committee included in the three months ended May 2, 2015 that is not included in the three months ended April 30, 2016 combined with \$2.0 million of lower costs for the surety bonds related to the litigation with CMU. In addition, the decrease included a \$6.9 million reversal of previously recognized share-based compensation expense related to certain members of our executive management for which the vesting was determined not probable upon their termination in April 2016. These decreases were partially offset by increases due to higher legal expenses of \$8.3 million mainly associated with certain accounting and internal control matters that are the subject of investigations by the Securities and Exchange Commission and the U.S. Attorney, and which were also investigated by the Company's Audit Committee, beginning in the second quarter of fiscal 2016, combined with \$7.6 million of higher professional fees, primarily for audit-related services.

*Amortization of Acquired Intangible Assets*

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

	Three Months Ended		
	April 30, 2016	May 2, 2015	% Change
	(in thousands, except percentage)		
Amortization of acquired intangible assets	\$ 2,461	\$ 2,568	(4.2)%
% of net revenue	0.5%	0.3%	

**Table of Contents**

Amortization of acquired intangible assets decreased by \$0.1 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015. The decrease reflects the decline in amortization expense of acquired intangible assets as certain intangible assets have become fully amortized.

*Interest and Other Income, Net*

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
Interest and other income, net	\$ 1,488	\$ 5,167	(71.2)%
% of net revenue	0.3%	0.7%	

Interest and other income, net, decreased by \$3.7 million for the three months ended April 30, 2016 compared to the three months ended May 2, 2015, primarily due to the recognition of foreign currency losses from the revaluation of our foreign currency denominated tax liabilities as the U.S. dollar weakened during the three months ended April 30, 2016 compared to the three months ended May 2, 2015. In addition, we had lower interest income due to overall lower interest rates and average cash balances.

*Provision (benefit) for Income Taxes*

	<b>Three Months Ended</b>		
	<b>April 30, 2016</b>	<b>May 2, 2015</b>	<b>% Change</b>
	<b>(in thousands, except percentage)</b>		
Provision (benefit) for income taxes	\$ (4,955)	\$ 4,329	(214.5)%

We had an effective tax rate of 17.9% in the three months ended April 30, 2016. Our income tax benefit for the three months ended April 30, 2016 included the current income tax benefit of \$2.7 million and a deferred tax benefit of \$2.5 million for the portion of a payment to the Company's former Chief Executive Officer that became deductible after his departure from the Company in April 2016, offset by a net increase in unrecognized tax benefits of \$0.2 million. The net increase in unrecognized tax benefits arose from penalties and interest of \$0.7 million accrued on the outstanding unrecognized tax benefit balance, partially offset by the release of \$0.5 million due to expiration of the statute of limitations in a non-U.S. jurisdiction.

We had an effective tax rate of 23.5% in the three months ended May 2, 2015. Our income tax provision for the three months ended May 2, 2015 included the current income tax liability of \$4.3 million, plus an additional provision of \$3.1 million related to a \$15.4 million payment to the Company's former Chief Executive Officer, which were offset by a net reduction in unrecognized tax benefits of \$3.1 million. The net reduction in unrecognized tax benefits arose from the release of \$4.0 million due to the expiration of the statute of limitations in a non-U.S. jurisdiction, which was partially offset by penalties and interest of \$0.9 million accrued on the outstanding unrecognized tax benefit balance.

It is reasonably possible that the amount of unrecognized tax benefits could increase or decrease significantly due to changes in tax law in various jurisdictions, new tax audits and changes in the U.S. dollar as compared to foreign currencies within the next 12 months. Excluding these factors, uncertain tax positions may decrease by as much as \$16.3 million from the lapse of statutes of limitation in various jurisdictions during the next 12 months. Government tax authorities from several non-U.S. jurisdictions are also examining our tax returns. We believe that we have adequately provided for any reasonably foreseeable outcomes related to our tax audits and that any settlement will not have a material effect on our results at this time.

We operate under tax incentives in certain countries, which may be extended if certain additional requirements are satisfied. The tax incentives are conditional upon meeting certain employment and investment thresholds. The impact of these tax incentives decreased foreign taxes by \$0.9 million and \$3.3 million in the three months ended April 30, 2016 and May 2, 2015, respectively. The benefit of the tax incentives on net income per share was less than \$0.01 per share for the three months ended April 30, 2016 and \$0.01 per share for the three months ended May 2, 2015.

**Liquidity and Capital Resources**

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

Our principal source of liquidity as of April 30, 2016 consisted of approximately \$1.6 billion of cash, cash equivalents and short-term investments, of which approximately \$760 million was held by foreign subsidiaries (outside Bermuda). Approximately \$570 million of this amount held by foreign subsidiaries is related to undistributed earnings, which have been indefinitely reinvested outside of Bermuda. These funds are primarily held in China, Israel, the United States and Switzerland. We have plans to use such amounts to fund various activities outside of Bermuda including working capital requirements, capital expenditures for expansion, funding of future acquisitions, or other financing activities. If such funds were needed by the parent company in Bermuda or if the amounts were otherwise no longer considered indefinitely reinvested, we would incur a tax expense of approximately \$175 million.

---

**Table of Contents**

We believe that our existing cash, cash equivalents and short-term investments, together with cash generated from operations, 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, any declared dividends 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 to adequate manufacturing capacity, the timing and extent of research and development projects and increases in operating expenses, which are all subject to uncertainty. In addition, we are named as defendants to several litigation actions and an unfavorable outcome in any current litigation could have a material adverse effect on our liquidity, cash flows and results of operations.

On May 18, 2016, we announced that our board of directors declared a cash dividend of \$0.06 per share paid on July 12, 2016 to shareholders of record as of June 14, 2016.

Future payment of a regular quarterly cash dividend on our common shares will be subject to, among other things, the best interests of the Company and our shareholders, our results of operations, cash balances and future cash requirements, financial condition, statutory requirements under Bermuda law and other factors that our board of directors may deem relevant. Our dividend payments may change from time to time, and we cannot provide assurance that we will continue to declare dividends at all or in any particular amounts. In addition, developments in ongoing litigation could affect our ability to make a dividend payment on a declared payment date until such time as we can meet statutory requirements under Bermuda law.

***Cash Flows from Operating Activities***

Net cash used in operating activities was \$609.6 million for the three months ended April 30, 2016. The cash outflows from operations for the three months ended April 30, 2016 were due to \$22.7 million of net loss adjusted for \$51.4 million of non-cash items and changes in working capital of \$638.3 million. The cash outflow from working capital for the three months ended April 30, 2016 was primarily driven by the decrease in the CMU accrued litigation settlement that was fully paid in the three months ended April 30, 2016. The effect on such decreases in working capital was partially offset by the cash inflow to working capital from decreases in accounts receivable due to lower sales, decrease in prepaid expenses and other assets due to receipt of \$53.7 million cash for unsettled trades of available-for-sale securities, and inventories, combined with an increase in accounts payable.

Net cash provided by operating activities was \$58.9 million for the three months ended May 2, 2015. The cash inflows from operations for the three months ended May 2, 2015 were primarily due to \$14.1 million of net income adjusted for \$62.9 million of non-cash items and changes in working capital of \$18.1 million.

***Cash Flows from Investing Activities***

Net cash generated from investing activities was \$162.4 million for the three months ended April 30, 2016 compared to net cash used in investing activities of \$166.6 million for the three months ended May 2, 2015. For the three months ended April 30, 2016 net cash generated from investing activities was primarily driven by sales and maturities of available-for-sale securities of \$316.3 million. This increase was partially offset by payments of \$93.4 million for the purchase of available-for-sale securities and \$50.0 million for the purchase of time deposits.

For the three months ended May 2, 2015, net cash used in investing activities of \$166.6 was primarily due to net cash outflows from purchases of available-for-sales securities of \$392.9 million less the sales and maturities of available-for-sale securities of \$247.5 million and the payment of \$10.2 million purchase of equipment previously leased.

***Cash Flows from Financing Activities***

Net cash used in financing activities was \$50.7 million for the three months ended April 30, 2016 compared to net cash used in financing activities of \$64.5 million for the three months ended May 2, 2015. For the three months ended April 30, 2016, net cash used in financing activities was primarily attributable to payments of our quarterly dividends of \$30.5 million and \$15.3 million minimum tax withholding payments on behalf of employees for net share settlements.

Net cash used in financing activities of \$64.5 million for the three months ended May 2, 2015 was primarily attributable to payments of our quarterly dividends of \$30.9 million and repurchase of our common shares in the open market for \$20.3 million under our share repurchase program. In addition, we paid \$22.3 million for the minimum tax withholding on behalf of employees for net share settlements, which was partially offset by \$13.0 million proceeds from the issuance of our common shares under our share-based plans.





---

## **Table of Contents**

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

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 April 30, 2016, we were not involved in any unconsolidated SPE transactions.

In the CMU litigation, in order to stay the execution of the final judgment pending its appeal, we filed a supersedeas bond for \$1.54 billion with the District Court. The bond was issued by a consortium of sureties authorized by the U.S. Treasury. If the judgment is affirmed after the completion of all appellate proceedings, and we do not thereafter fully satisfy the judgment within thirty days, the sureties are obligated under the bond to make payment to CMU. In support of the bond, we entered into separate indemnity agreements with each of the sureties to indemnify the sureties from all costs and payments made under the bond. The indemnity agreements did not require collateral to be posted at the time of the issuance of the bond. However, the indemnity agreements provide that each of the sureties have the right to demand to be placed in funds or call for collateral under pre-defined events. See also Note 10 Commitments and Contingencies in the Notes to the Unaudited Condensed Consolidated Financial Statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q for a further discussion of this matter.

On November 14, 2014, we filed a second surety bond for \$216 million and filed a commitment letter from the sureties to issue up to an additional \$95 million in bonding under certain conditions. The second bond and commitment are secured by our campus located in Santa Clara, California, which has a carrying value of \$131.4 million at April 30, 2016.

In connection with the settlement that was reached with CMU for a total \$750 million in February 2016, the primary supersedeas bond that the Company entered into has been reduced to \$439 million and the secondary bond has been adjusted to \$311 million. For additional information, see CMU litigation in Note 10 Commitments and Contingencies in the Notes to the Unaudited Condensed Consolidated Financial Statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q.

### **Contractual Obligations**

We presented our contractual obligations at January 30, 2016 in our Annual Report on Form 10-K for the fiscal year then ended. There have been no material changes outside the ordinary course of business in those obligations during the three months ended April 30, 2016, other than as noted under the section entitled Off-Balance Sheet Arrangements above.

### **Indemnification Obligations**

See Note 10 Commitments and Contingencies in the Notes to the Unaudited Condensed Consolidated Financial Statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q.

### **Item 3. 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 did not have any outstanding debt as of April 30, 2016. We maintain an investment policy that requires minimum credit ratings, diversification of credit risk and limits the long-term interest rate risk by requiring maturities of generally 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, asset backed securities, corporate debt securities and municipal debt securities. These investments are classified as available-for-sale and, consequently, are recorded on our consolidated balance sheets at fair market value with their related unrealized gain or loss reflected as a component of accumulated other comprehensive income in the consolidated statements of 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 April 30, 2016, a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$9.9 million 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 significant cash flow impact.

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

As of April 30, 2016, our investment portfolio included auction rate securities with an aggregate par value of \$10.0 million classified as long-term investments. Although these auction rate securities have continued to pay interest and the underlying collateral has not deteriorated, there is currently limited trading volume. We use a discounted cash flow model to estimate the fair value of the auction rate securities based on its estimated timing and amount of future interest and principal payments. In developing the discounted cash flow model, we consider the credit quality and liquidity of the underlying securities and related issuer, the collateralization of underlying security investments and other considerations.

**Table of Contents**

We made a determination in January 2016 that we did not expect to recover the par value of these auction rate securities and consider any impairment of these securities to be other-than-temporary. There has been no change in circumstances since January 2016 based upon the current time horizon for holding these securities and the continuation of an illiquid market. Based on our assessment of fair value as of April 30, 2016, we determined there was no further impairment of these auction rate securities.

During the three months ended April 30, 2016, we sold auction rate securities, which had an aggregate par value of \$2.5 million, for net proceeds of \$2.4 million. The carrying value of these auction rate securities was previously written down to \$2.3 million, and therefore, resulted in a gain of \$0.1 million upon its sale.

*Investment Risk.* We invest in equity instruments of privately-held companies for strategic purposes. We account for these investments under the cost method when we do not have the ability to exercise significant influence or control over the operations of these companies and under the equity method when we have the ability to exercise significant influence, but do not have control. The carrying value of these equity investments was \$5.8 million at April 30, 2016, and was included in other non-current assets in our consolidated balance sheets. 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.* 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 operations in Israel and China represent a large portion of our total foreign currency exposure. Additionally, we may hold certain assets and liabilities, including potential tax liabilities in local currency on our consolidated 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 interest and other income, net. The related effects of foreign exchange fluctuations on local currency expenses are recorded to operating expenses. 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 expenses denominated in Israeli shekel and on occasion Chinese yuan. We enter into certain short-term forward exchange contracts, typically less than 12 months in duration, to hedge exposures for expenses 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. Financial instruments not designated as hedges or hedges deemed ineffective are recorded in interest and other income, net. We do not hedge our tax liabilities denominated in local currency on our consolidated 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 4.6%. 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 on the hedged portion of our exposure.

**Item 4. Controls and Procedures****Audit Committee Investigation**

As reported in the Current Report on Form 8-K filed by the Company with the SEC on March 1, 2016, the Audit Committee (the "Audit Committee") of the Company's Board of Directors completed and made its findings with respect to an internal investigation (the "Audit Committee Investigation"). This investigation generally included a review of certain revenue recognized in the first and second quarters of fiscal 2016 and the fourth quarter of fiscal 2015, including transactions that would have, in the normal course of events and but for action by Marvell employees, been completed and recognized in a subsequent quarter (referred to internally as "pull-ins"), the accrual of a litigation reserve in the second quarter of fiscal 2016, and stated belief by Marvell's former Chief Executive Officer and Chairman of ownership of certain patent rights related to the Final-Level Cache invention. The Audit Committee also reviewed disclosure concerning the foregoing matters and related circumstances, and whether senior management's operating style during the relevant periods resulted in an open flow of information and communication to set an appropriate "tone at the top" for an effective control environment.



---

## **Table of Contents**

The Audit Committee identified no fraudulent activity in the course of this investigation. The Audit Committee's key conclusions regarding this investigation included the following:

- (a) revenue related to pull-in transactions during the subject periods was for most such transactions properly recognized in accordance with Marvell's revenue recognition policy and generally accepted accounting principles, though for certain transactions Marvell's internal controls were not fully followed and revenue from certain pull-in and distributor transactions was recognized prematurely based on certain provisions of the revenue recognition policy in place at the time;
- (b) Marvell's public disclosures for such periods related to revenue properly including pull-in transactions were not misleading;
- (c) while Marvell's former Chief Executive Officer and Chairman stated his belief that he had a good faith claim to ownership of the Final-Level Cache invention, the invention was owned by Marvell during all periods in which company resources related to such invention were deployed and, as a result, there were no errors in accounting related to the Final-Level Cache invention, and the disclosures relating to such invention contained in Marvell's Form 10-Q for the first quarter of fiscal 2016 were not misleading; and
- (d) while Marvell lacked a well-structured process to establish significant and judgmental reserves associated with litigation and royalties, there was no contemporaneous evidence that the increase in the reserve ultimately recorded in Marvell's books and records for the second quarter of fiscal 2016 was not reasonable or appropriate.

The Audit Committee investigation also found certain "tone at the top" issues, including significant pressure on sales and finance personnel to meet revenue targets and the failure by Marvell's former Chief Executive Officer and Chairman and by legal counsel to raise to the appropriate level at the appropriate times the initial assertion of Marvell's former Chief Executive Officer and Chairman that he owned the Final-Level Cache invention, the patent applications for which he later assigned to Marvell.

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

Management, with the participation of our principal executive officer and principal 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 April 30, 2016. 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 our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective as of April 30, 2016 to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Notwithstanding the material weaknesses in our internal controls over financial reporting as of April 30, 2016, management has concluded that the consolidated financial statements included in this Form 10-Q present fairly, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States.

## **Material Weaknesses**

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. Management concluded that we did not maintain effective internal control over financial reporting as of April 30, 2016 because of certain material weaknesses in our internal control over financial reporting as of April 30, 2016 as follows:

*Entity Level Controls* The control environment, risk assessment, control activities, information and communication, and monitoring controls were not effective. These controls are the responsibility of senior management, who sets the tone of the organization, influences the control consciousness of employees, and is the foundation for internal control over financial reporting. As noted above, the Audit Committee

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

investigation identified certain tone at the top issues that contributed to an ineffective control environment and to the deficiencies aggregating to the material weaknesses set forth below. The Company's entity level controls related to assessing risk and communication of information, including the reporting of information to management and the Board of Directors, did not operate effectively as they relied upon information derived from processes where applicable controls were not fully followed.

*Sufficiency of Accounting and Finance Department Resources* The Company had insufficient finance and accounting department resources with appropriate knowledge, expertise and training commensurate with the Company's corporate structure and financial reporting requirements to effectively assess risk, and design, operate and oversee effective internal controls over financial reporting. The

## **Table of Contents**

Company has experienced significant turnover at the senior financial management level. The lack of certain appropriate resources in the Company's accounting and finance departments contributed to an ineffective control environment. This lack of resources resulted in inconsistent expectations around the preparation, review and maintenance of documentation critical to the design and consistent execution of internal controls. These factors contributed to deficiencies in the Company's financial reporting process over (i) the establishment of significant and judgmental reserves, which included reserves for litigation and royalties, (ii) the Company's process and controls over identification, communication and approval of related party transactions, and (iii) a lack of precision in the review controls over certain information and assumptions impacting various financial reporting areas, and monitoring of the Company's terms and conditions for certain contractual arrangements to verify that all critical contract terms were communicated to accounting and finance for assessment.

*Revenue Recognition* The Company's internal controls to identify, accumulate and assess the accounting impact of certain concessions or side agreements on whether the Company's revenue recognition criteria had been met were in certain instances not fully followed or were not effective. As noted above, the Audit Committee identified certain tone at the top issues, due to which the Company's controls were not effective to ensure (i) consistent standards in the level of documentation of agreements required to support accurate recording of revenue transactions, and (ii) that such documentation is retained, complete, and independently reviewed to ensure certain terms impacting revenue recognition were accurately reflected in the Company's books and records.

*Process to Identify Contingencies, Including Those Related to the Company's Intellectual Property* The Company's internal controls over contingencies were not effective as the Company lacked a well-structured process, including granting appropriate authority to senior legal management, to ensure the identification of actual and potential claims, and the assessment of probability of loss related to them. The Company also lacked a well-structured process to ensure the timely assignment to the Company of intellectual property.

## **Remediation Efforts to Address Material Weaknesses**

Our management has worked, and continues to work, to strengthen our internal control over financial reporting. We are committed to ensuring that such controls are designed and operating effectively. Since identifying the material weaknesses in our internal control over financial reporting, we have developed and are implementing remediation plans to fully address these control failures. Our Board of Directors and management take internal controls over financial reporting and the integrity of the Company's financial statements seriously and believe that the remediation steps described below, including with respect to personnel changes, were and are essential steps to maintaining strong and effective internal controls over financial reporting and a strong internal control environment.

The Company has taken significant steps to address the material weaknesses set forth above. The Company believes that making the following changes was a critical step toward addressing the tone at the top concerns that contributed to the material weaknesses it has identified.

The following steps are among the measures that have been implemented or will be implemented as soon as practicable after the date of this filing:

### **Entity Level Controls**

By unanimous action of the Board of Directors, we appointed five new independent directors to our Board of Directors. Two of the new members of the Board have significant finance and accounting experience, have been appointed to the Audit Committee, and have been determined by the Board of Directors to be audit committee financial experts as defined in rules promulgated by the SEC.

We appointed a new Chairman of our Board of Directors.

We recently appointed a new Chief Executive Officer who we expect will provide strong leadership to the Company and establish open lines of communication with his internal business unit leaders and external partners.

We are actively engaged in a search for a new, permanent Chief Financial Officer who we expect will bring expertise and leadership to the Company and our finance team and establish open lines of communication with his or her internal business unit leaders and the finance and accounting team world-wide.



We conducted a training program for our executives, vice presidents and associate vice presidents, led by our executive management team, to enhance awareness and understanding of the Company's Code of Conduct and Ethics Policy and the importance of financial reporting integrity. We are developing and planning to implement a similar program for finance, operations and sales personnel and others involved in the sales process.

In accordance with changes to the Audit Committee Charter approved by the Board on September 23, 2015, the Audit Committee now approves future earnings guidance in accordance with the Company's normal earnings cycle.

In accordance with changes to the Executive Compensation Committee Charter approved by the Board on September 23, 2015, the Executive Compensation Committee now reviews and approves the compensation arrangements of any employees with a title of Associate Vice President or higher reporting directly to the Chief Executive Officer, including, but not limited to, those designated as executive officers. We believe this provides more transparent monitoring of performance of, and incentives offered to, senior management that may influence tone at the top.

## **Table of Contents**

### **Sufficiency of Accounting and Finance Department Resources**

We are actively engaged in a search for a new Chief Financial Officer who we expect will provide strong leadership to the Company and, in particular, to our finance and accounting function, and establish open lines of communication with his or her staff and internal business partners.

We have hired a new Senior Vice President of Finance and a new Assistant Controller to increase the depth and breadth of knowledge and expertise commensurate with the Company's corporate structure and financial reporting requirements. These new finance team members will support the Company's substantial efforts to design, operate and oversee effective internal controls over financial reporting.

We are actively engaged in a search for a new Chief Accounting Officer and Controller who we expect will bring additional technical expertise to our finance and accounting function and will support the Company's substantial efforts to design, operate and oversee effective internal controls over financial reporting.

We continue to enhance the Company's finance and accounting department staff, in terms of both number and competency of personnel, particularly in the area of revenue recognition and technical accounting. We expect our new senior finance team to contribute their substantial experience and abilities to raise the level of expertise across the finance and accounting teams.

The Audit Committee directed our Interim Chief Financial Officer, in coordination with our new Chief Legal Officer, to undertake a comprehensive review of the procedures to be followed by the Company for establishing significant and judgmental reserves, including reserves for litigation and royalties. As a result, a more comprehensive policy has been established and will be adhered to going forward. In addition, management will continue to report to the Audit Committee the methodologies used and basis of estimates for the establishment of significant and judgmental reserves.

We are in the process of developing a roles and responsibilities matrix for our key accounting and operations personnel to incorporate segregation of duties considerations. We expect our incoming senior finance personnel to contribute their significant expertise to this process.

### **Revenue Recognition**

We have revised our revenue recognition policy to prohibit Company-initiated pull-in transactions. For fiscal 2017, pull ins will have no meaningful effect on our revenue.

As noted above, we conducted a training program for our executive officers, vice presidents and associate vice presidents, led by our executive management team, to enhance awareness and understanding of the Company's Code of Conduct and Ethics Policy and the importance of financial reporting integrity. We are developing and planning to implement a similar program for finance, operations and sales personnel and others involved in the sales process.

### **Process to Identify Contingencies, Including Those Related to the Company's Intellectual Property**

The Audit Committee directed the Company to hire a Chief Legal Officer, such position having the authority of an executive officer (as defined in SEC rules) and to be deemed as such. The Company has hired a new Executive Vice President and Chief Legal Officer to fill this role.

The Audit Committee directed the Interim CFO, in coordination with the Chief Legal Officer, to undertake a comprehensive review of the procedures to be followed by the Company for establishing significant and judgmental reserves, including reserves for litigation and royalties. As a result, a more comprehensive policy has been established and will be adhered to going forward. In addition, management will continue to report to the Audit Committee the methodologies used and basis of estimates for the establishment of significant and judgmental reserves.

We continue to enhance our patent disclosure and assignment policy, and have adopted an augmented patent disclosure and assignment process.

The Audit Committee has directed management to develop a detailed plan and timetable for the completion of the implementation of the foregoing remedial measures and will monitor their implementation. In addition, under the direction of the Audit Committee, management will continue to review and make necessary changes to the overall design of our internal control environment, as well as to our policies and procedures in order to improve the overall effectiveness of internal control over financial reporting.

Aside from the above remediations, we reconstituted the memberships and chairmanships of the audit committee, the executive compensation committee and the nominating and governance committees in May 2016.

## **Table of Contents**

We are committed to maintaining a strong internal control environment, and believe that these remediation actions represent significant improvements in our controls. Additional remediation measures continue to be considered and will be implemented as appropriate. We will continue to assess the effectiveness of our remediation efforts in connection with our evaluations of internal control over financial reporting.

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

There were no changes in our internal control over financial reporting during the three months ended April 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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

Our management, including our principal executive officer and our principal 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.

**Table of Contents**

**PART II. OTHER INFORMATION**

**Item 1. Legal Proceedings**

The information under the caption "Contingencies" as set forth in "Note 10 Commitments and Contingencies" of our Notes to Unaudited Condensed Consolidated Financial Statements, included in Part I, Item 1, is incorporated herein by reference. For additional discussion of certain risks associated with legal proceedings, see Part II, Item 1A, "Risk Factors," immediately below.

**Item 1A. Risk Factors**

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

**Factors That May Affect Future Results**

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

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

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

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

the highly competitive nature of the end markets we serve, particularly within the semiconductor industry;

any current and future litigation that could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business;

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

our ability to maintain a competitive cost structure for our manufacturing and assembly and test processes and our reliance on third parties to produce our products;

cancellations, rescheduling or deferrals of significant customer orders or shipments, as well as the ability of our customers to manage inventory;

gain or loss of a design win or key customer;

seasonality in sales of consumer devices in which our products are incorporated;

failure to qualify our products or our suppliers manufacturing lines;

our ability to develop and introduce new and enhanced products in a timely and effective manner, as well as our ability to anticipate and adapt to changes in technology;

failure to protect our intellectual property;

---

**Table of Contents**

impact of a significant natural disaster, including earthquakes, floods and tsunamis, particularly in certain regions in which we operate or own buildings, such as Santa Clara, California and where our third party suppliers operate, such as Taiwan and elsewhere in the Pacific Rim; and

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

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. From January 31, 2015 through April 30, 2016, our common shares traded as low as \$7.40 and as high as \$16.78 per share. Accordingly, you may not be able to resell your common shares at or above the price you paid. In future periods, our stock price could decline if, amongst other factors, our revenues or operating results are below our estimates or the estimates or expectations of securities analysts and investors. As a result of stock price volatility, we may be subject to securities class action 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.

***We operate in intensely competitive markets, and our failure to compete effectively would harm our results of operations.***

The semiconductor industry and specifically the data storage, networking 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. This has especially intensified as semiconductor companies have begun to offer more integrated platforms. We expect competition to continue to increase as industry standards continue to evolve and become better known, and others realize the market potential of this trend to platform integration. 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. Our efforts to introduce new products into markets with entrenched competitors will expose us to additional competitive pressures. For example, we are facing and expect we will continue to face significant competition in the networking market. Additionally, customer expectations and requirements have been evolving rapidly. For example, customers now expect us to provide turnkey solutions. Some of our competitors may be better situated to meet changing customer needs. As competition in the markets in which we operate continues to increase, our revenues and gross margins may decline. 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 data communication 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. While we continue to pursue similar strategic relationships, and currently have significant financial and technical resources, 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.

In addition, semiconductor providers have experienced consolidation over the past several years. For example, Avago Technologies Limited (which has renamed itself as Broadcom Limited ( Broadcom )) acquired Broadcom Corporation in February 2016 and LSI Corporation in May 2014, Intel acquired Altera Corporation in December 2015 and NXP Semiconductors acquired Freescale Semiconductor, Ltd. These transactions and other pending transactions may further consolidate competition in our industry. Consolidation among our competitors could lead to a changing competitive landscape, capabilities and market share, which could harm our results of operations.

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

The HDD 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 largest customers are participants in this industry. For example, in fiscal 2016, our revenue was negatively affected by a meaningful decline in overall HDD unit demand.

HDD 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 HDD industry often result in shifts in market share among the industry's participants. If the HDD manufacturers using our products do not retain or increase their market share, our sales may decrease.

In addition, the HDD industry experienced consolidation in the past. For example, Western Digital completed the acquisition of Hitachi's HDD unit in March 2012, Seagate Technology PLC ( Seagate ) completed the acquisition of Samsung's HDD unit in December 2011 and Toshiba acquired the HDD operations of Fujitsu during fiscal 2010. Consolidation among our customers could lead to changing demand for our products,

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

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. If we are unable to leverage our technology and customer relationships, we may not capitalize on the increased opportunities for our products within the combined company.



---

## **Table of Contents**

Furthermore, future changes in the nature of information storage products and personal computing devices could reduce demand for traditional HDDs. For example, products using alternative technologies, such as SSD and other storage technologies could become a source of competition to manufacturers of HDDs. Although we offer SSD controllers, leveraging our technology in hard drives, we cannot ensure we will be able to maintain significant market share if demand for traditional HDDs decreases. Additionally, we depend on a few customers for our SSD controllers and as such, the loss of any SSD controller customer or a significant reduction in sales we make to them (for example, as a result of a significant drop in market share) may harm our financial condition and 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, or if any of these key customers experience a significant decline in market share, our revenues may decrease substantially.***

We receive a significant amount of our revenues from a limited number of customers. Net revenue from our two largest customers represented 29% and 34% of our net revenue for the three months ended April 30, 2016 and May 2, 2015, respectively. Sales to our largest customers have fluctuated significantly from period to period and year to year primarily due to the timing and number of design wins with each customer, natural disasters that may divert a customer's operations, as well as the continued diversification of our customer base as we expand into new markets, and will likely continue to fluctuate 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:

a significant portion of our sales are made on a purchase order basis, which permits our customers to cancel, change or delay product purchase commitments with relatively short notice to us;

customers may purchase integrated circuits from our competitors;

customers may discontinue sales or lose market share in the markets for which they purchase our products (for example, a significant customer of our SSD products has recently seen a significant drop in its market share);

customers may develop their own solutions or acquire fully developed solutions from third-parties (for example, in September 2014, Seagate acquired the SSD business from Broadcom); or

customers may be subject to severe business disruptions.

***We have been named as a party to several legal proceedings and may be named in additional ones in the future, including 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, or to stop selling our products or force us to redesign our products.***

We have been named as a party to several lawsuits, government inquiries or investigations and other legal proceedings (referred to as "litigation"), and we may be named in additional ones in the future. Please see Note 10 "Commitments and Contingencies" of our Notes to the Unaudited Condensed Consolidated Financial Statements set forth in Part I, Item 1 of this Quarterly Report on Form 10-Q (Note 10) for a more detailed description of a number of the litigation matters in which we are currently engaged. In particular, 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. The amount of damages alleged in intellectual property infringement claims can often be very significant. For example, the settlement of a lawsuit with Carnegie Mellon University resulted in a payment by us of \$750 million as described further in Note 10.

From time to time our subsidiaries and customers receive, and may continue to receive in the future, standards-based infringement claims, as well as claims against us and our subsidiaries' proprietary technologies, particularly those related to storage technology, microprocessors and other circuit components. Our subsidiaries and customers could face claims of infringement for certain patent licenses that have not been renewed. These claims could result in litigation and/or claims for indemnification, which, in turn, could subject us to significant liability for

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

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;

---

**Table of Contents**

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 or other license violations 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.

Under certain circumstances, we have contractual and other legal obligations to indemnify and to incur legal expenses for current and former directors and officers. Additionally, 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. If we are required to make a significant payment under any of our indemnification obligations, our results of operations may be harmed.

The ultimate outcome of litigation 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. Litigation, regardless of the outcome, may result in significant expenditures, diversion of our management's time and attention from the operation of our business, damage to our reputation or relationship with third parties, which could materially and adversely affect our business, financial condition, results of operations, cash flows and our stock price.

***We identified material weaknesses in our internal controls over financial reporting, and we may be unable to develop, implement and maintain effective internal controls in future periods.***

The Sarbanes-Oxley Act of 2002 and SEC rules require that management report annually on the effectiveness of our internal control over financial reporting and our disclosure controls and procedures. Among other things, management must conduct an assessment of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Based on management's assessment, we concluded that our internal controls over financial reporting were not effective as of April 30, 2016. The specific material weaknesses are described in Item 4 of this Quarterly Report on Form 10-Q. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements would not be prevented or detected on a timely basis. As with any material weakness, if our remedial measures are insufficient to address the material weaknesses, or if additional material weaknesses or significant deficiencies in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements. Any material misstatements could result in a restatement of our consolidated financial statements, cause us to fail to meet our reporting obligations or cause investors to lose confidence in our reported financial information, leading to a decline in our stock price.

Even when we have remediated our material weaknesses, any 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. Because of its inherent limitations, internal control over financial reporting will not necessarily prevent all error and all fraud. 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. In addition, we may modify the design and operating effectiveness of our internal controls, which could affect the overall effectiveness or evaluation of the control system in the future by us or our independent registered public accounting firm. We cannot ensure that any design will succeed in achieving its stated goals under all potential future conditions, as controls may become inadequate due to changes in conditions or deterioration in the degree of compliance. Any failure to maintain an effective system of internal control over financial reporting could limit our ability to provide reliable financial reports, or to detect and prevent fraud, which would harm our business.

***Matters relating to or arising from our Audit Committee investigation, including regulatory proceedings, litigation matters and potential additional expenses, may adversely affect our business and results of operations.***

As previously disclosed in our public filings, the Audit Committee of our Board of Directors of the Company has recently completed an investigation that generally included a review of certain revenue recognized in the first and second quarters of fiscal 2016 and the fourth quarter of fiscal 2015, including transactions that would have, in the normal course of events and but for action by certain Marvell employees, been

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

completed and recognized in a subsequent quarter (referred to internally as "pull-ins"), the accrual of a litigation reserve in the second quarter of fiscal 2016, and the stated belief by Marvell's former Chairman and Chief Executive Officer of ownership of certain patent rights related to the Final-Level Cache invention and his later assignment of associated patent applications to Marvell. In addition, we are also the subject of investigations by the Securities and Exchange Commission and the U.S. Attorney related to these matters. We are fully cooperating with the SEC and the U.S. Attorney with respect to those investigations.

## **Table of Contents**

To date, we have incurred significant expenses related to legal, accounting, and other professional services in connection with the investigations and related matters, and may continue to incur significant additional expenses with regard to these matters and related remediation efforts. The expenses incurred, and expected to be incurred, on the investigations, the impact of our delay in meeting our periodic reports on the confidence of investors, employees and customers, and the diversion of the attention of the management team that has occurred, and is expected to continue, has adversely affected, and could continue to adversely affect, our business, financial condition and results of operations or cash flows. As a result of the delay in filing of our periodic reports, we are not eligible to use a registration statement on Form S-3, and will not be eligible to use that form until we have timely filed all periodic reports required by the SEC for one year, which may make it more difficult, costly or time consuming for us to raise capital if we should choose to do so.

As a result of the matter reported above, we are exposed to greater risks associated with litigation, regulatory proceedings and government enforcement actions. In addition, securities class actions or other lawsuits have been filed against us, our directors and officers (see also, *We are subject to pending securities class action and shareholder derivative legal proceedings* below). Any future such investigations or additional lawsuits may adversely affect our business, financial condition, results of operations and cash flows.

### ***We are subject to pending securities class action and shareholder derivative legal proceedings.***

Several securities class action lawsuits were filed against us following our September 11, 2015 announcement of an independent audit committee investigation of certain accounting and internal control matters in the second quarter of fiscal 2016 and our subsequent delinquency in filing our periodic financial reports. We also have been named as a nominal defendant in a shareholder derivative lawsuit filed in fiscal 2016 concerning our announcement of the audit committee investigation. No specific amounts of damages have been alleged in the class action lawsuits and, by the nature of the lawsuits, no damages will be alleged against Marvell in the derivative lawsuit.

We will continue to incur legal fees in connection with these pending cases, including expenses for the reimbursement of legal fees of present and former officers and directors under indemnification obligations. The expense of continuing to defend such litigation may be significant. We intend to defend these lawsuits vigorously, however there can be no assurance that we will be successful in any defense. If any of the lawsuits related to our audit committee investigation are adversely decided, we may be liable for significant damages directly or under our indemnification obligations, which could adversely affect our business, results of operations and cash flows. Further, the amount of time that will be required to resolve these lawsuits is unpredictable and these actions may divert management's attention from the day-to-day operations of our business, which could adversely affect our business, results of operations and cash flows.

### ***Our indemnification obligations and limitations of our director and officer liability insurance may have a material adverse effect on our financial condition, results of operations and cash flows.***

Under Bermuda law, our articles of association and bye-laws and certain indemnification agreements to which we are a party, we have an obligation to indemnify, or we have otherwise agreed to indemnify, certain of our current and former directors and officers with respect to current and future investigations and litigation, including the matters discussed in Part II Item 1, Legal Proceedings. In connection with some of these pending matters, we are required to, or we have otherwise agreed to, advance, and have advanced, legal fees and related expenses to certain of our current and former directors and officers and expect to continue to do so while these matters are pending. Certain of these obligations may not be covered matters under our directors and officers liability insurance, or there may be insufficient coverage available. Further, in the event the directors and officers are ultimately determined to not be entitled to indemnification, we may not be able to recover the amounts we previously advanced to them.

In addition, we have incurred significant expenses in connection with the Audit Committee's independent investigation, the pending government investigations, and the shareholder litigation. We cannot provide any assurances that pending claims, or claims yet to arise, including the cost of fees, penalties or other expenses will not exceed the limits of our insurance policies, that such claims are covered by the terms of our insurance policies or that our insurance carrier will be able to cover our claims. Additionally, to the extent there is coverage of these claims, the insurers also may seek to deny or limit coverage in some or all of these matters. Furthermore, the insurers could become insolvent and unable to fulfill their obligation to defend, pay or reimburse us for insured claims. Accordingly, we cannot be sure that claims will not arise that are in excess of the limits of our insurance or that are not covered by the terms of our insurance policy. Due to these coverage limitations, we may incur significant unreimbursed costs to satisfy our indemnification obligations, which may have a material adverse effect on our business, financial condition, results of operations or cash flows.

## **Table of Contents**

***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 ability to grow our business.***

We do not have our own manufacturing or assembly facilities and have very limited in-house testing facilities. Therefore, 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, and other sources are located in China and Singapore. In addition, substantially all of our third-party assembly and testing facilities are located in China, Singapore and Taiwan. 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 including, for example, earthquakes (particularly in Taiwan and elsewhere in the Pacific Rim close to fault lines), tsunamis or typhoons, or by political, social or economic instability. In the case of such an event, our revenues, cost of goods sold and results of operations would be negatively impacted. In addition, there are limited numbers of alternative foundries and identifying and implementing alternative manufacturing facilities would be time consuming. As a result, if we needed to implement alternate manufacturing facilities, we could experience significant expenses and delays in product shipments, which could harm our 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. When demand is strong, availability of foundry capacity may be constrained or not available, 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. 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. In particular, as we and others in our industry transition to smaller geometries, our manufacturing partners may be supply constrained or may charge premiums for these advanced technologies, which may harm our business or results of operations. See also, *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.* 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.

Despite our strategy to move to multiple sources, most of our products 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 would 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 our revenues, net income and cash flow.

In order to secure sufficient foundry capacity when demand is high and to 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, or 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, which are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. 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. In addition, we may face lower manufacturing yields and reduced quality in the process of ramping up and diversifying our manufacturing partners. Poor yields from our

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

foundries, or defects, integration issues or other performance problems with our products could cause us significant customer relations and business reputation problems, harm our financial performance and result in financial or other damages

## **Table of Contents**

to our customers. Our customers could also seek damages in connection with product liability claims, which would likely be time consuming and costly to defend. In addition, defects could result in significant costs. See also, *Costs related to defective products could have a material adverse effect on us.*

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

### *Commodity Prices*

We are also subject to risk from fluctuating market prices of certain commodity raw materials, including gold and copper, which are incorporated into our end products or used by our suppliers to manufacture our end products. Supplies for such commodities may from time to time become restricted, or general market factors and conditions may affect pricing of such commodities.

***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 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. In addition, the development of new silicon devices is highly complex, and due to supply chain cross-dependencies and other issues, we may experience delays in completing the development, production and introduction of our new products. For example, we believe the success of Final-Level Cache ( FLC<sup>™</sup> ) technology may be an important factor in the future growth of the company. If FLC<sup>™</sup> technology fails to function in actual product development at the level required for market acceptance, or if our customers do not readily embrace the technology as quickly as we would anticipate, our future results may be impacted. No revenue was derived from FLC<sup>™</sup> related products in fiscal 2016 and we anticipate no revenue in fiscal 2017 as these products are still in development. See also, *We may be unable to protect our intellectual property, which would negatively affect our ability to compete.*

Our ability to adapt to 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. We may also have to incur substantial unanticipated costs to comply with these new standards. 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 in a timely manner. Even if we and our customers introduce new and enhanced products to the market, those products may not achieve market acceptance.

***Our gross margin and results of operations may be adversely affected in the future by a number of factors, including decreases in average selling prices of products over time and shifts in our product mix.***

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. In addition, our more recently introduced products tend to have higher associated costs because of initial overall development and production expenses. Therefore, over time, we may not be able to maintain or improve our gross margins. Our financial results could suffer if we are unable to offset any reductions in our average selling prices by other cost reductions through efficiencies, introduction of higher margin products and other means.

To attract new customers or retain existing customers, we may offer certain price concessions to certain customers, which could cause our average selling prices and gross margins to decline. 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 by our competitors and other factors. We expect that we will continue to have to reduce prices of existing products in the future. Moreover, because of the wide price differences across the markets we serve, the mix and types of performance capabilities of our products sold may affect the average selling prices of our products and have a substantial impact on our revenue and gross margin. We may enter new markets in which a significant amount of competition exists, and this may require us to sell our products with lower gross margins than we earn in our established businesses. If we are successful in growing revenue in these markets, our overall gross margin may decline. Fluctuations in the mix and types of our products may also affect the extent to which we are able to recover the fixed costs and investments associated with a particular product, and as a result may harm our financial results.

Additionally, because we do not operate our own manufacturing, assembly or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities, and our costs may even increase, which could also reduce our gross margins.





---

**Table of Contents**

*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; 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. Due to their inability to predict demand or other reasons, some of our customers may accumulate excess inventories and, as a consequence, defer purchase of our products. We cannot accurately predict what or how many products our 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. 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 customer's product development processes, which may include extensive qualification and testing of components included in their products, including ours. In many cases, they design their products to use components from multiple suppliers. This creates the risk that our customers may 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.

Our products are incorporated into complex devices and systems, which may create supply chain cross-dependencies. For example, in fiscal 2012, many areas of Thailand sustained massive damage from flooding, which disrupted the global supply chain for HDDs. Due to cross dependencies, any supply chain disruptions could negatively impact the demand for our products in the short term. We have a limited ability to predict the timing of a supply chain correction. In addition, the market share of our customers could be adversely impacted on a long-term basis due to any continued supply chain disruption, which could negatively affect our results of operations.

If we overestimate customer demand, our excess or obsolete inventory may increase significantly, which would reduce our gross margin and adversely affect our financial results. The risk of obsolescence and/or excess inventory is heightened for devices designed for consumer electronics due to the rapidly changing market for these types of products. 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.

A portion of our inventory is held by, and net revenues are derived from, sales through third-party logistics providers, whereby revenues are recognized when product is pulled from stock by the end customer. From time to time, our customers will take early delivery of product at the end of a fiscal quarter that was scheduled for delivery in the following fiscal quarter, which we internally refer to as "pull-in" if the early delivery was requested by Marvell. Variation in timing of large orders and our ability to effectively manage required inventory levels may be impacted by such arrangements, including increased expenses associated with excess or obsolete inventory and volatility in timing of revenues recognized period to period. Our operating results under these arrangements may vary significantly from quarter to quarter based on fluctuations in demand and our ability to deliver on forecasted customer orders. Beginning in fiscal 2017, our policy is not to engage in pull-in transactions and we therefore do not expect them to have any meaningful impact on our net revenue in future periods.

*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. 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 occur as anticipated, our profitability could be adversely affected due to our higher expense levels.

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 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

**Table of Contents**

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.

***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, including as a result of volatile global economic conditions. 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.

We cannot predict the timing, strength or duration of any economic slowdown or recovery or the impact of any such events on our vendors, customers or us. 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 lengthy product development coupled with challenging macroeconomic conditions could adversely impact our results of operations.

***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 ensure 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.

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

We had approximately \$2.0 billion of goodwill and \$15.1 million of acquired intangible assets, net on our consolidated balance sheet as of April 30, 2016. Under generally accepted accounting principles in the United States, we are required to review our intangible assets including goodwill 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 for impairment annually on the last business day of our fiscal fourth quarter and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. We have identified that our business operates as a single operating segment with two components (Storage, and Smart Networked Devices and Solutions), which we have concluded can be aggregated into a single reporting unit for purposes of testing goodwill impairment. The fair value of the reporting unit is determined by taking our market capitalization as determined through quoted market prices and as adjusted for a control premium and other relevant factors. If our fair value declines to below our carrying value, we could incur significant goodwill impairment charges, which could negatively impact our financial results. If in the future a change in our organizational structure results in more than one reporting unit, we will be required to allocate our goodwill and perform an assessment of goodwill for impairment in each reporting unit. As a result, we may have an impairment of goodwill in one of our reporting units.



---

## **Table of Contents**

In addition, from time to time, we have made investments in 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. If the operations of any businesses that we have acquired declines significantly, we could incur significant intangible asset impairment charges. Impairment charges could have a material impact on our results of operations in any period.

***We depend on key personnel to manage our business, and if we are unable to retain our current personnel or attract additional qualified personnel, our ability to develop and successfully market our products could be harmed. We have undergone significant management changes which could affect our implementation of our business strategy.***

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 competition for qualified technical personnel with significant experience in the design, development, manufacturing, marketing and sales of integrated circuits is intense, and 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. Additionally, we typically do not enter into employment agreements with any of our key technical personnel and the loss of such personnel could harm our business, as their knowledge of our business and industry would be extremely difficult to replace.

In recent years, we have experienced significant senior management turnover, including the departure of our Chief Executive Officer, Sehat Sutardja, and our President, Weili Dai, as officers and employees of the Company, effective April 1, 2016, and the retirement of our former Chief Financial Officer in May 2015. Our board of directors recently appointed our new President and Chief Executive Officer, who will assume his duties as the Company's principal executive officer immediately following the filing of our Quarterly Report on Form 10-Q for the second fiscal quarter of 2017, and is conducting a formal search to identify a new, permanent Chief Financial Officer. In addition, our board of directors has designated our Chairman of the Board, Richard S. Hill, as the Company's Interim Principal Executive Officer until we file our Quarterly Report on Form 10-Q for the second fiscal quarter of 2017.

The marketplace for such key employees is very competitive and limited. Our growth may be adversely impacted if we are unable to attract and retain key employees. In addition, turnover of senior management can adversely impact our stock price, our results of operations and our client relationships and has made recruiting for future management positions more difficult. We have recently added a number of new executive officers in addition to our President and Chief Executive Officer, including our new Executive Vice President, Marketing and Sales, our Executive Vice President and Chief Legal Officer, our Chief Operations Officer and our Senior Vice President of Finance. Although the individual members of our senior management team have significant experience, they, and the Chief Financial Officer we hire, previously have not worked together as a group, and it will take time for them to become an integrated management team. Delays in the integration of our management team could affect our ability to implement our business strategy, which could have a material adverse effect on our business and results of operations.

***As a result of our global operations, we face additional 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 with operations in Asia represented approximately 94% of our net revenue in the three months ended April 30, 2016 and 96% of our net revenue in each of fiscal 2015 and 2016.

We also have substantial operations outside of the United States. These operations are directly influenced by the political and economic conditions of the region in which they are located, and with respect to Israel, possible military hostilities, such as the recent turmoil in the region, that could affect our operations there. 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, political unrest, boycotts, curtailment of trade and other business restrictions;

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

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;

local laws and practices that favor local companies, including business practices that we are prohibited from engaging in by the Foreign Corrupt Practices Act and other anti-corruption laws and regulations;

**Table of Contents**

difficulties in staffing and managing foreign operations;

natural disasters, including earthquakes, tsunamis and floods;

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.

As a result of having global operations, the sudden disruption of the supply chain and/or the manufacture of our customer's products caused by events outside of our control could impact our results of operations by impairing our ability to timely and efficiently deliver our products. For example, during fiscal 2012, the earthquake and tsunami that affected Japan disrupted the global supply chain for certain components important to our products and the flooding in Thailand affected the supply chain and manufacturing of the products for a number of our customers.

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.

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

We have experienced, from time to time, hardware and software defects and bugs associated with the introduction of our highly complex products. Despite our testing procedures, we cannot ensure that errors will not be found in new 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 that could adversely affect our relationships with our customers. In addition, the process of identifying a recalled product in devices that have been widely distributed may be lengthy and require significant resources and we may have difficulty identifying the end customers of the defective products in the field, which may cause us to incur significant replacement costs, contract damage claims from our customers and further reputational harm. Any of these problems could materially adversely affect our results of operations.

***Any potential future acquisitions, strategic investments, divestitures, mergers or joint ventures may subject us to significant risks, any of which could harm our business.***

Our long-term strategy may include identifying and acquiring, investing in or merging with suitable candidates on acceptable terms, or divesting of certain business lines or activities. In particular, over time, we may acquire, make investments in, or merge with providers of product offerings that complement our business or may terminate such activities. Mergers, acquisitions and divestitures include a number of risks and present financial, managerial and operational challenges, including but not limited to:



diversion of management attention from running our existing business;

possible material weaknesses in internal control over financial reporting;

increased expenses including legal, administrative and compensation expenses related to newly hired or terminated employees;

---

**Table of Contents**

increased costs to integrate or, in the case of a divestiture, separate the technology, personnel, customer base and business practices of the acquired or divested business or assets;

potential exposure to material liabilities not discovered in the due diligence process;

potential adverse effects on reported operating results due to possible write-down of goodwill and other intangible assets associated with acquisitions;

potential damage to customer relationships or loss of synergies in the case of divestitures; and

unavailability of acquisition financing or unavailability of such financing on reasonable terms.

Any acquired business, technology, service or product could significantly under-perform relative to our expectations, and may not achieve the benefits we expect from possible acquisitions. For all these reasons, our pursuit of an acquisition, investment, divestiture, merger or joint venture could cause its actual results to differ materially from those anticipated.

***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.

***Changes in existing taxation benefits, rules or practices may adversely affect our financial results.***

Changes in existing taxation benefits, rules or practices may also have a significant effect on our reported results. For example, both the U.S. Congress and the G-20 (Group of Twenty Finance Ministers and Central Bank Governors) 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. Furthermore, in prior years, we have entered into agreements in certain foreign jurisdictions that if certain criteria are met, the foreign jurisdiction will provide a more favorable tax rate than their current statutory rate. For example, we have obtained an undertaking from the Minister of Finance of Bermuda that in the event Bermuda enacts legislation imposing tax computed on profits, income, or capital asset, gain or appreciation, then the imposition of any such taxes will not apply to us until March 31, 2035. Additionally, our Singapore subsidiary qualified for Pioneer status until it expired in June 2014. However, we re-negotiated with the Singapore government and in fiscal 2015, they extended the Development and Expansion Incentive until June 2019. Furthermore, under the Israeli Encouragement law of approved or benefited enterprise, two branches of our subsidiary in Israel, Marvell Israel (M.I.S.L) Ltd., are entitled to, and have certain existing programs that qualify as, approved and benefited tax programs that include reduced tax rates and exemption of certain income through fiscal 2027. Our subsidiary in Switzerland also had tax incentives on revenues from research and design, and wafer supply trading activities, which expired at the end of fiscal 2016. Moreover, receipt of past and future benefits under tax agreements may depend on our ability to fulfill commitments regarding employment of personnel or performance of specified activities in the applicable jurisdiction. Changes in our business plans, including divestitures, could result in termination of an agreement or loss of benefits thereunder. If any of our tax agreements in any of these foreign jurisdictions were terminated, our results of operations would be harmed.

***If we were classified as a passive foreign investment company, there would be adverse tax consequences to U.S. holders of our ordinary shares.***

If we were classified as a passive foreign investment company or PFIC under section 1297 of the Internal Revenue Code, of 1986, as amended, or the Code, for any taxable year during which a U.S. holder holds ordinary shares, such U.S. holder generally would be taxed at ordinary income tax rates on any gain realized on the sale or exchange of the ordinary shares and on any excess distributions (including constructive distributions) received on the ordinary shares. Such U.S. holder could also be subject to a special interest charge with respect to any such gain or

excess distribution.

We would be classified as a PFIC for U.S. federal income tax purposes in any taxable year in which either (i) at least 75% of our gross income is passive income or (ii) on average, the percentage of our assets that produce passive income or are held for the production of passive income is at least 50% (determined on an average gross value basis). We were not classified as a PFIC for fiscal year 2016 or in any prior taxable year. Whether we will, in fact, be classified as a PFIC for any subsequent taxable year depends on our assets and income over the course of the relevant taxable year and, as a result, cannot be predicted with certainty. In particular,

**Table of Contents**

because the total value of our assets for purposes of the asset test will be calculated based upon the market price of our ordinary shares, a significant and sustained decline in the market price of our ordinary shares and corresponding market capitalization relative to our passive assets could result in our being classified as a PFIC. There can be no assurance that we will not be classified as a PFIC in the future or the Internal Revenue Service will not challenge our determination concerning PFIC status for any prior period.

***We rely upon the performance of our information technology systems to process, transmit, store and protect electronic information, and the failure of or security breaches of any critical information technology system may result in serious harm to our reputation, business, results of operations and/or financial condition.***

We are heavily dependent on our technology infrastructure and maintain and rely upon certain critical information systems for the effective operation of our business. We routinely collect and store sensitive data in our information systems, including intellectual property and other proprietary information about our business and that of our customers, suppliers and business partners. These information technology systems are subject to damage or interruption from a number of potential sources including natural disasters, viruses, destructive or inadequate code, malware, power failures, cyber-attacks, and other events. We have implemented processes for systems under our control intended to mitigate risks, however, there can be no guarantee that they will be effective in mitigating those risks. Given the frequency of cyber attacks and resulting breaches reported by other businesses and governments, it is likely we will experience one or more breaches of some extent in the future. We may incur significant costs in order to implement, maintain and/or update security systems that we feel are necessary to protect our information systems or we may miscalculate the level investment necessary to protect our systems adequately. To the extent that any system failure, accident or security breach results in disruptions or interruptions to our operations or the theft, loss or disclosure of, or damage to our data or confidential information, including our intellectual property, our reputation, business, results of operations and/or financial condition could be materially adversely affected.

***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 and acquired 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 patents, copyrights, trademarks, trade secret laws, contractual provisions, confidentiality agreements, licenses 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. Notwithstanding these agreements, we have experienced disputes with employees regarding ownership of intellectual property in the past. For instance, we have had a dispute with Dr. Sehat Sutardja, our former Chief Executive Officer and a current member of our board of directors, related to his stated belief of ownership of certain patent rights related to the Final-Level Cache invention and his later assignment of associated patent applications to Marvell. Our Audit Committee investigated this claim and concluded that the FLC invention was owned by the Company. To the extent that any third party has a claim to ownership of any relevant technologies used in our products, we may not be able to recognize the full revenue stream from such relevant technologies.

We have been issued a significant number of U.S. and foreign patents and have a significant 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.

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. Open source software is made available under licenses that 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. 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 if the license is terminated.

## **Table of Contents**

*There can be no assurance that we will continue to declare cash dividends at all or in any particular amount, and statutory requirements under Bermuda Law, as well as ongoing litigation, may require us to defer payment of declared dividends.*

In May 2012, we announced the declaration of our first quarterly cash dividend. Future payment of a regular quarterly cash dividend on our common shares will be subject to, among other things, the best interests of our company and our shareholders, our results of operations, cash balances and future cash requirements, financial condition, statutory requirements under Bermuda law and other factors that the board of directors may deem relevant. Our dividend payments may change from time to time, and we cannot provide assurance that we will continue to declare dividends at all or in any particular amounts. In addition, developments in ongoing litigation could affect our ability to make a dividend payment on a declared payment date until such time as we can meet statutory requirements under Bermuda law. A reduction in, a delay of, or elimination of our dividend payments could have a negative effect on our share price.

*We must comply with a variety of existing and future laws and regulations that could impose substantial costs on us and may adversely affect our business.*

We are subject to various state, federal and international laws and regulations governing the environment, including restricting the presence of certain substances in electronic products and making producers of those products financially responsible for the collection, treatment, recycling and disposal of those products. In addition, we are also subject to various industry requirements restricting the presence of certain substances in electronic products. Although our management systems are designed to maintain compliance, we cannot assure you that we have been or will be at all times in complete compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions.

We and our customers are also subject to various import and export laws and regulations. Government export regulations apply to the encryption or other features contained in some of our products. If we fail to continue to receive licenses or otherwise comply with these regulations, we may be unable to manufacture the affected products at foreign foundries or ship these products to certain customers, or we may incur penalties or fines.

We are also subject to the conflict mineral rules promulgated by the SEC, which impose disclosure requirements on us regarding the use of conflict minerals mined from the Democratic Republic of Congo and adjoining countries in our products and the procedures our manufacturer s use to prevent the sourcing of such conflict minerals. The ongoing implementation of these requirements could affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices, including our products. As a result, there may only be a limited pool of suppliers who provide conflict-free metals, and we cannot assure you that we will be able to obtain products in sufficient quantities or at competitive prices, which could adversely affect our operations and product margins. Additionally, if we are unable to sufficiently source conflict-free metals, we may face difficulties in satisfying customers who may require that the products they purchase from us are conflict-free, which may harm our sales and operating results.

The costs of complying (including the costs of any investigations, auditing and monitoring) with these laws could adversely affect our current or future business. In addition, future regulations may become more stringent or costly and our compliance costs and potential liabilities could increase, which may harm our current or future business.

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

Our buildings in Santa Clara, California; 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;

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

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;

failure to achieve expected cost savings due to extended non-occupancy of a vacated property intended to be leased; 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.

---

**Table of Contents**

*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 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, economic considerations and availability considerations. If our insurance coverage is insufficient to protect us against unforeseen catastrophic losses, any uncovered losses could adversely affect our financial condition and results of operations.

*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 affect service of process within the United States upon us, or to enforce against us in U.S. 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 U.S. 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 U.S. 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 or to any matter arising under U.S. federal securities laws. This waiver will limit the rights of our shareholders to assert claims against our officers and directors unless the act complained of involves fraud or dishonesty or arises as a result of a breach of U.S. federal securities laws. Therefore, so long as acts of business judgment do not involve fraud or dishonesty or arise as a result of a breach of U.S. federal securities laws, 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 fraud or dishonesty, or arises as a result of a breach of U.S. federal securities laws.

*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 shares without shareholder approval; and

a shareholder vote requiring the approval 66<sup>2/3</sup>% of votes cast in person or by proxy to approve any business combination in the event the action is not approved by at least 66<sup>2/3</sup>% of the directors holding office at the date of the Board meeting to approve the action.

These foregoing provisions could make it more difficult for a third party to acquire us, even if doing so would be a benefit to our shareholders.

**Table of Contents****Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

There were no sales of unregistered securities during the three months ended April 30, 2016.

**Issuer Purchases of Equity Securities**

There were no share repurchases during the three months ended April 30, 2016.

**Item 6. Exhibits**

Exhibit No.	Item	Form	File Number	Incorporated by Reference from Exhibit Number	Filed with SEC
3.1	Memorandum of Association of Marvell Technology Group Ltd.	S-1	333-33086	3.1	3/23/2000
3.2	Third Amended and Restated Bye-Laws of Marvell Technology Group Ltd.	8-K	000-30877	3.1	7/13/2010
3.3	Memorandum of Increase of Share Capital of Marvell Technology Group Ltd.	8-K	000-30877	3.1	7/6/2006
10.1	Agreement between Marvell Technology Group Ltd. and Starboard Value LP	8-K	000-30877	10.1	4/27/2016
31.1	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer				Filed herewith
31.2	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer				Filed herewith
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 for Principal Executive Officer				Filed herewith
32.2*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 for Principal Financial Officer				Filed herewith
101.INS	XBRL Instance Document				Filed herewith
101.SCH	XBRL Taxonomy Extension Schema Document				Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Document				Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				Filed herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				Filed herewith

# Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

\* The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q 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.



**Table of Contents**

**SIGNATURES**

Pursuant to the requirements 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.

Date: August 10, 2016

By: /s/ DAVID P. EICHLER  
**David P. Eichler**  
*Interim Chief Financial Officer*  
**(Principal Financial Officer)**