

**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 December 28, 2018

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: 1-8703

Western Digital®
WESTERN DIGITAL CORPORATION
(Exact Name of Registrant as Specified in Its Charter)

Delaware

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

**5601 Great Oaks Parkway
San Jose, California**

(Address of principal executive offices)

33-0956711

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

95119

(Zip Code)

Registrant's telephone number, including area code: (408) 717-6000

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 every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

As of the close of business on January 29, 2019, 290,850,938 shares of common stock, par value \$0.01 per share, were outstanding.

WESTERN DIGITAL CORPORATION
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Unless otherwise indicated, references herein to specific years and quarters are to our fiscal years and fiscal quarters, and references to financial information are on a consolidated basis. As used herein, the terms "we," "us," "our," the "Company," "WDC" and "Western Digital" refer to Western Digital Corporation and its subsidiaries, unless we state, or the context indicates, otherwise.

WDC, a Delaware corporation, is the parent company of our data storage business. Our principal executive offices are located at 5601 Great Oaks Parkway, San Jose, California 95119. Our telephone number is (408) 717-6000 and our website is www.wdc.com. The information on our website is not incorporated in this Quarterly Report on Form 10-Q.

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FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements within the meaning of the federal securities laws. Any statements that do not relate to historical or current facts or matters are forward-looking statements. You can identify some of the forward-looking statements by the use of forward-looking words, such as “may,” “will,” “could,” “would,” “project,” “believe,” “anticipate,” “expect,” “estimate,” “continue,” “potential,” “plan,” “forecast,” and the like, or the use of future tense. Statements concerning current conditions may also be forward-looking if they imply a continuation of current conditions. Examples of forward-looking statements include, but are not limited to, statements concerning:

- *expectations regarding our Flash Ventures joint venture with Toshiba Memory Corporation, the flash industry and our flash wafer output plans;*
- *our cost and expense reduction actions;*
- *our quarterly cash dividend policy and share repurchase program;*
- *expectations regarding our product development and technology plans;*
- *expectations regarding our future results of operations;*
- *expectations regarding the outcome of legal proceedings in which we are involved;*
- *expectations regarding the impact of the Tax Cuts and Jobs Act enacted on December 22, 2017 on the Company;*
- *expectations regarding the repatriation of funds from our foreign operations;*
- *our beliefs regarding tax benefits and the timing of future payments, if any, relating to the unrecognized tax benefits, and the adequacy of our tax provisions;*
- *expectations regarding capital investments and sources of funding for those investments; and*
- *our beliefs regarding the sufficiency of our available liquidity to meet our working capital, our debt and debt covenants, our dividend plans and our capital expenditure needs.*

Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. You are urged to carefully review the disclosures we make concerning risks and other factors that may affect our business and operating results, including those made in Part II, Item 1A of this Quarterly Report on Form 10-Q, and any of those made in our other reports filed with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document. We do not intend, and undertake no obligation, to publish revised forward-looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions, except par value)
(Unaudited)

	December 28, 2018	June 29, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 4,013	\$ 5,005
Accounts receivable, net	1,715	2,197
Inventories	3,427	2,944
Other current assets	587	492
Total current assets	9,742	10,638
Property, plant and equipment, net	3,077	3,095
Notes receivable and investments in Flash Ventures	2,318	2,105
Goodwill	10,074	10,075
Other intangible assets, net	2,148	2,680
Other non-current assets	580	642
Total assets	\$ 27,939	\$ 29,235
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,925	\$ 2,265
Accounts payable to related parties	310	259
Accrued expenses	1,526	1,274
Accrued compensation	345	479
Current portion of long-term debt	244	179
Total current liabilities	4,350	4,456
Long-term debt	10,370	10,993
Other liabilities	2,307	2,255
Total liabilities	17,027	17,704
Commitments and contingencies (Notes 7, 9, 11 and 14)		
Shareholders' equity:		
Preferred stock, \$0.01 par value; authorized — 5 shares; issued and outstanding — none	—	—
Common stock, \$0.01 par value; authorized — 450 shares; issued — 312 shares; outstanding — 291 shares and 296 shares, respectively	3	3
Additional paid-in capital	4,062	4,254
Accumulated other comprehensive loss	(35)	(39)
Retained earnings	8,532	8,757
Treasury stock — common shares at cost; 21 shares and 16 shares, respectively	(1,650)	(1,444)
Total shareholders' equity	10,912	11,531
Total liabilities and shareholders' equity	\$ 27,939	\$ 29,235

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share amounts)
(Unaudited)

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
Revenue, net	\$ 4,233	\$ 5,336	\$ 9,261	\$ 10,517
Cost of revenue	3,189	3,323	6,553	6,591
Gross profit	1,044	2,013	2,708	3,926
Operating expenses:				
Research and development	539	629	1,115	1,221
Selling, general and administrative	309	381	665	745
Employee termination, asset impairment, and other charges	20	48	66	100
Total operating expenses	868	1,058	1,846	2,066
Operating income	176	955	862	1,860
Interest and other income (expense):				
Interest income	15	14	30	30
Interest expense	(118)	(197)	(234)	(402)
Other income (expense), net	8	2	6	(4)
Total interest and other expense, net	(95)	(181)	(198)	(376)
Income before taxes	81	774	664	1,484
Income tax expense	568	1,597	640	1,626
Net income (loss)	\$ (487)	\$ (823)	\$ 24	\$ (142)
Income (loss) per common share				
Basic	\$ (1.68)	\$ (2.78)	\$ 0.08	\$ (0.48)
Diluted	\$ (1.68)	\$ (2.78)	\$ 0.08	\$ (0.48)
Weighted average shares outstanding:				
Basic	290	296	291	295
Diluted	290	296	296	295
Cash dividends declared per share	\$ 0.50	\$ 0.50	\$ 1.00	\$ 1.00

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)
(Unaudited)

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
Net income (loss)	\$ (487)	\$ (823)	\$ 24	\$ (142)
Other comprehensive income, before tax:				
Actuarial pension gain	1	—	1	—
Foreign currency translation adjustment	31	6	(6)	2
Net unrealized gain on derivative contracts and available-for-sale securities	7	10	6	13
Total other comprehensive income, before tax	39	16	1	15
Income tax benefit (expense) related to items of other comprehensive income, before tax	2	(3)	3	(3)
Other comprehensive income, net of tax	41	13	4	12
Total comprehensive income (loss)	\$ (446)	\$ (810)	\$ 28	\$ (130)

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)
(Unaudited)

	Six Months Ended	
	December 28, 2018	December 29, 2017
Cash flows from operating activities		
Net income (loss)	\$ 24	\$ (142)
Adjustments to reconcile net income (loss) to net cash provided by operations:		
Depreciation and amortization	952	1,068
Stock-based compensation	158	196
Deferred income taxes	281	(129)
Loss on disposal of assets	1	12
Write-off of issuance costs and amortization of debt discounts	19	23
Other non-cash operating activities, net	37	16
Changes in:		
Accounts receivable, net	482	(99)
Inventories	(483)	65
Accounts payable	(256)	(276)
Accounts payable to related parties	51	44
Accrued expenses	254	95
Accrued compensation	(134)	17
Other assets and liabilities, net	(212)	1,425
Net cash provided by operating activities	<u>1,174</u>	<u>2,315</u>
Cash flows from investing activities		
Purchases of property, plant and equipment	(500)	(416)
Proceeds from the sale of property, plant and equipment	3	10
Acquisitions, net of cash acquired	—	(99)
Purchases of investments	(33)	(57)
Proceeds from sale of investments	13	29
Proceeds from maturities of investments	7	16
Notes receivable issuances to Flash Ventures	(508)	(621)
Notes receivable proceeds from Flash Ventures	312	112
Strategic investments and other, net	(19)	19
Net cash used in investing activities	<u>(725)</u>	<u>(1,007)</u>
Cash flows from financing activities		
Issuance of stock under employee stock plans	61	99
Taxes paid on vested stock awards under employee stock plans	(69)	(67)
Repurchases of common stock	(563)	—
Repayment of revolving credit facility	(500)	—
Dividends paid to shareholders	(292)	(295)
Settlement of debt hedge contracts	—	28
Repayment of debt	(75)	(4,114)
Proceeds from debt	—	2,963
Debt issuance costs	—	(5)
Net cash used in financing activities	<u>(1,438)</u>	<u>(1,391)</u>
Effect of exchange rate changes on cash	(3)	1
Net decrease in cash and cash equivalents	(992)	(82)
Cash and cash equivalents, beginning of year	5,005	6,354
Cash and cash equivalents, end of period	<u>\$ 4,013</u>	<u>\$ 6,272</u>
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	\$ 264	\$ 140
Cash paid for interest	\$ 216	\$ 308

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in millions)

	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	Shares	Amount	Shares	Amount				
Balance at June 29, 2018	312	\$ 3	(16)	\$ (1,444)	\$ 4,254	\$ (39)	\$ 8,757	\$ 11,531
Net income	—	—	—	—	—	—	511	511
Employee stock plans	—	—	1	198	(256)	—	—	(58)
Adoption of New Accounting Standards	—	—	—	—	—	—	56	56
Stock-based compensation	—	—	—	—	79	—	—	79
Repurchases of common stock	—	—	(8)	(563)	—	—	—	(563)
Dividends to shareholders	—	—	—	—	8	—	(152)	(144)
Foreign currency translation adjustment	—	—	—	—	—	(37)	—	(37)
Balance at September 28, 2018	<u>312</u>	<u>\$ 3</u>	<u>(23)</u>	<u>\$ (1,809)</u>	<u>\$ 4,085</u>	<u>\$ (76)</u>	<u>\$ 9,172</u>	<u>\$ 11,375</u>
Net loss	—	—	—	—	—	—	(487)	(487)
Employee stock plans	—	—	2	159	(109)	—	—	50
Stock-based compensation	—	—	—	—	79	—	—	79
Dividends to shareholders	—	—	—	—	7	—	(153)	(146)
Actuarial pension gain	—	—	—	—	—	1	—	1
Foreign currency translation adjustment	—	—	—	—	—	29	—	29
Net unrealized gain on derivative contracts	—	—	—	—	—	11	—	11
Balance at December 28, 2018	<u>312</u>	<u>\$ 3</u>	<u>(21)</u>	<u>\$ (1,650)</u>	<u>\$ 4,062</u>	<u>\$ (35)</u>	<u>\$ 8,532</u>	<u>\$ 10,912</u>

WESTERN DIGITAL CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in millions)

	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	Shares	Amount	Shares	Amount				
Balance at June 30, 2017	312	\$ 3	(18)	\$ (1,666)	\$ 4,506	\$ (58)	\$ 8,633	\$ 11,418
Net income	—	—	—	—	—	—	681	681
Employee stock plans	—	—	1	156	(197)	—	—	(41)
Adoption of New Accounting Standards	—	—	—	—	(19)	—	70	51
Stock-based compensation	—	—	—	—	97	—	—	97
Dividends to shareholders	—	—	—	—	9	—	(155)	(146)
Foreign currency translation adjustment	—	—	—	—	—	(4)	—	(4)
Net unrealized gain on derivative contracts and available-for-sale securities	—	—	—	—	—	3	—	3
Balance at September 29, 2017	<u>312</u>	<u>\$ 3</u>	<u>(17)</u>	<u>\$ (1,510)</u>	<u>\$ 4,396</u>	<u>\$ (59)</u>	<u>\$ 9,229</u>	<u>\$ 12,059</u>
Net loss	—	—	—	—	—	—	(823)	(823)
Employee stock plans	—	—	2	165	(92)	—	—	73
Stock-based compensation	—	—	—	—	99	—	—	99
Dividends to shareholders	—	—	—	—	7	—	(156)	(149)
Foreign currency translation adjustment	—	—	—	—	—	6	—	6
Net unrealized gain on derivative contracts and available-for-sale securities	—	—	—	—	—	7	—	7
Balance at December 29, 2017	<u>312</u>	<u>\$ 3</u>	<u>(15)</u>	<u>\$ (1,345)</u>	<u>\$ 4,410</u>	<u>\$ (46)</u>	<u>\$ 8,250</u>	<u>\$ 11,272</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. Organization and Basis of Presentation

Western Digital Corporation (“Western Digital” or “the Company”) is a leading developer, manufacturer and provider of data storage devices and solutions that address the evolving needs of the information technology industry and the infrastructure that enables the proliferation of data in virtually every other industry. The Company’s broad portfolio of technology and products address the following key markets: Client Devices; Data Center Devices and Solutions; and Client Solutions. The Company also generates license and royalty revenue related to its intellectual property (“IP”), which is included in each of these three categories.

The accounting policies followed by the Company are set forth in Part II, Item 8, Note 1, *Organization and Basis of Presentation*, of the Notes to Consolidated Financial Statements included in the Company’s Annual Report on Form 10-K for the fiscal year ended June 29, 2018. In the opinion of management, all adjustments necessary to fairly state the Condensed Consolidated Financial Statements have been made. All such adjustments are of a normal, recurring nature. Certain information and footnote disclosures normally included in the Consolidated Financial Statements prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”) have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). These Condensed Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and the notes thereto included in the Company’s Annual Report on Form 10-K for the fiscal year ended June 29, 2018. The results of operations for interim periods are not necessarily indicative of results to be expected for the full year.

Fiscal Year

The Company’s fiscal year ends on the Friday nearest to June 30 and typically consists of 52 weeks. Fiscal years 2019, which ends on June 28, 2019, and 2018, which ended on June 29, 2018, are each comprised of 52 weeks, with all quarters presented consisting of 13 weeks. Fiscal year 2020, which ends on July 3, 2020, will be comprised of 53 weeks, with the first quarter consisting of 14 weeks and the remaining quarters consisting of 13 weeks each.

Use of Estimates

Company management has made estimates and assumptions relating to the reporting of certain assets and liabilities in conformity with U.S. GAAP. These estimates and assumptions have been applied using methodologies that are consistent throughout the periods presented. However, actual results could differ materially from these estimates.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 2. Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted

On August 29, 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2018-15, “Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract” (“ASU 2018-15”), to reduce diversity in practice in accounting for the costs of implementing cloud computing arrangements that are service contracts. ASU 2018-15 allows entities to apply the guidance in the FASB Accounting Standards Codification (“ASC”) 350-40 to determine which implementation costs are eligible to be capitalized as assets in a cloud computing arrangement that is considered a service contract. The Company adopted this standard on a prospective basis effective June 30, 2018, the beginning of fiscal year 2019, as allowed by the standard. The adoption of this standard and the costs capitalized for the six months ended December 28, 2018 were not material to the Company’s Condensed Consolidated Financial Statements.

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” (“ASU 2018-02”). ASU 2018-02 allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act enacted on December 22, 2017 (the “2017 Act”). Consequently, the amendments eliminate the stranded tax effects resulting from the 2017 Act and will improve the usefulness of information reported to financial statement users. Because the amendments only relate to the reclassification of the income tax effects of the 2017 Act, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. For tax effects that are unrelated to the 2017 Act, the Company’s policy to release these from Accumulated other comprehensive loss on an individual item basis rather than a portfolio basis remains unchanged. The Company early adopted this standard effective June 30, 2018 and elected to reclassify stranded tax effects resulting from the 2017 Act from Accumulated other comprehensive loss to Retained earnings. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In August 2017, the FASB issued ASU No. 2017-12, “Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities” (“ASU 2017-12”). ASU 2017-12 simplifies hedge accounting through changes to both designation and measurement requirements. For hedges that qualify as highly effective, the new standard eliminates the requirement to separately measure and record hedge ineffectiveness with the entire change in fair value of designated hedge reported in the results of operations in the same line item as the hedged item. The Company early adopted this standard effective June 30, 2018, using the modified retrospective approach. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In May 2017, the FASB issued ASU No. 2017-09, “Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting” (“ASU 2017-09”). ASU 2017-09 provides clarification when a change to the terms or conditions of a share-based payment award must be accounted for as a modification. The new guidance requires modification accounting if the fair value, vesting condition or the classification of the award is not the same immediately before and after a change to the terms and conditions of the award. The Company adopted this standard on a prospective basis effective June 30, 2018. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In March 2017, the FASB issued ASU No. 2017-07, “Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost” (“ASU 2017-07”). ASU 2017-07 requires that the Company report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. In addition, the other components of net benefit cost are now presented in Other income (expense), net in the Condensed Consolidated Statements of Operations. The Company adopted this standard effective June 30, 2018. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In January 2017, the FASB issued ASU No. 2017-01, “Business Combinations (Topic 805): Clarifying the Definition of a Business” (“ASU 2017-01”). ASU 2017-01 narrows the definition of a “business.” This standard provides guidance to assist entities with evaluating when a set of transferred assets and activities is a business. The Company adopted this standard effective June 30, 2018, and will apply it prospectively to transactions occurring thereafter. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In October 2016, the FASB issued ASU No. 2016-16, “Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory” (“ASU 2016-16”). ASU 2016-16 removes the prohibition in the FASB ASC Topic 740 against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. The new standard is intended to reduce the complexity and diversity in practice related to the tax consequences of certain types of intra-entity asset transfers, particularly those involving IP. The Company adopted this standard effective June 30, 2018. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In January 2016, the FASB issued ASU No. 2016-01, “Financial Instruments — Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities” (“ASU 2016-01”). ASU 2016-01 provides guidance related to accounting for equity investments, financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. Marketable equity securities previously classified as available-for-sale equity investments are now measured and recorded at fair value with changes in fair value recorded within Other income (expense), net in the Condensed Consolidated Statements of Operations rather than as a component of Other comprehensive income as in prior years. In addition, the FASB clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The Company adopted this standard effective June 30, 2018. The adoption of this standard did not have a material impact on the Company’s Condensed Consolidated Financial Statements.

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers (Topic 606),” which superseded the requirements in ASC 605 “Revenue Recognition” (Topic 605). Topic 606 outlines a comprehensive five-step revenue recognition model based on the principle that an entity should recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Topic 606 also requires more detailed disclosures to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The Company adopted Topic 606 effective June 30, 2018, using the modified retrospective method to all contracts that were not completed contracts as of the beginning of the fiscal year. Results for reporting periods beginning with fiscal year 2019 are presented under Topic 606, while prior period information presented on the financial statements or elsewhere in this Quarterly Report on Form 10-Q is reported under the Company’s historic accounting policies under Topic 605 in effect for that period and is not adjusted to reflect the retrospective effect of the adoption of Topic 606. The cumulative effect of adopting Topic 606 was a post-tax increase to the opening retained earnings of \$56 million as of June 30, 2018, which was primarily related to our license and royalty revenue arrangements. These arrangements had no remaining performance obligations but were previously recognized under Topic 605 when they were reported to the Company by its licensees, which was generally one quarter in arrears from the licensees’ sales of the licensed products. Adoption of the standard did not have a material impact on the Company’s financial position, results of operations, and cash flows, as of or for the three and six months ended December 28, 2018, and the Company expects that the impact of the adoption of the new standard will not be material to its results of operations prospectively. See Note 3, *Revenues*, for additional disclosures related to this standard.

Recently Issued Accounting Pronouncements Not Yet Adopted

In October 2018, the FASB issued ASU No. 2018-16, “Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes” (“ASU 2018-16”). ASU 2018-16 allows for the use of the OIS rate based on the SOFR as a U.S. benchmark interest rate for hedge accounting purposes under Topic 815, Derivatives and Hedging. For public entities who have adopted ASU 2017-12, the amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, which for the Company is the first quarter of fiscal 2020. The Company is currently evaluating the impact this update will have on its Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In June 2016, the FASB issued ASU No. 2016-13, “Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments” (“ASU 2016-13”). ASU 2016-13 seeks to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments, including trade receivables, and other commitments to extend credit held by a reporting entity at each reporting date. The amendments require an entity to replace the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects current expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, which for the Company is the first quarter of fiscal 2021. The Company is currently evaluating the impact this update will have on its Consolidated Financial Statements.

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842)” (“ASU 2016-02”). ASU 2016-02 supersedes ASC 840 “Leases”. The amendments in this update require, among other things, that lessees recognize the following for all leases (unless a policy election is made by class of underlying asset to exclude short-term leases) at the commencement date: (1) a lease liability, which is a lessee’s obligation to make lease payments arising from a lease, measured on a discounted basis; and (2) a right-of-use asset, which is an asset that represents the lessee’s right to use, or the direct use of, a specified asset for the lease term. The FASB issued ASU 2018-11 on July 30, 2018, which allows entities to apply the provisions of ASC 842 at the effective date without adjusting comparative periods. The standard is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. The Company’s cross-functional project management team continues to identify and evaluate the impact of the amended guidance on the Company’s Consolidated Financial Statements and related disclosures, business processes, internal controls, and information systems. The Company has identified its leases and selected a third-party lease accounting software solution. The Company is in the process of implementing its lease accounting software solution and changes to its processes and internal controls to address the new lease standard. The Company’s implementation efforts are progressing as planned. The Company expects to adopt this standard in the first quarter of fiscal 2020 and elect the transition method provided in ASU 2018-11 to apply Topic 842 as of the date of adoption without adjusting comparative periods. The Company continues to evaluate the impact ASU 2016-02 will have on its Consolidated Financial Statements.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 3. Revenues

The Company offers a broad range of data storage products that include Client Devices, Data Center Devices and Solutions, and Client Solutions. Client Devices consist of hard disk drives (“HDDs”) and solid state drives (“SSDs”) for computing devices; flash-based embedded storage products; and flash-based memory wafers. Data Center Devices and Solutions consist of high-capacity enterprise HDDs and high-performance enterprise SSDs, data center software and system solutions. Client Solutions consist of HDDs and SSDs embedded into external storage products and removable flash-based products. The Company also generates license and royalty revenues related to its IP patent licenses which are not material.

The Company recognizes revenue when it satisfies a performance obligation by transferring control over a product or service to the customer. The transaction price to be recognized as revenue is adjusted for variable consideration, such as sales incentives, and excludes amounts collected on behalf of third parties, including taxes imposed by governmental authorities. The Company’s performance obligations are typically not constrained based on the Company’s history with similar transactions and that uncertainties are resolved in a fairly short period of time.

Substantially all of the Company’s revenue is from the sale of tangible products for which the performance obligations are satisfied at a point in time, generally upon delivery. The Company’s services revenue mainly includes post contract customer support, warranty as a service and maintenance contracts. The performance obligations for the Company’s services are generally satisfied ratably over the service period based on the nature of the service provided and contract terms. Similarly, revenue from patent licensing arrangements is recognized based on whether the arrangement provides the customer a right to use or right to access the IP. Revenue for a right to use arrangement is recognized at the time the control of the license is transferred to the customer. Revenue for a right to access arrangement is recognized over the contract period using the time lapse method. For the sales-based royalty arrangements, the Company estimates and recognizes revenue in the period in which customers’ licensable sales occur.

The Company’s customer payment terms are typically less than three months from the date control over the product or service is transferred to the customer. The Company uses the practical expedient and does not recognize a significant financing component for payment considerations of less than one year. The financing components of contracts with payment terms were not material.

The Company provides distributors and retailers (collectively referred to as “resellers”) with limited price protection for inventories held by resellers at the time of published list price reductions and/or a right of return. The Company also provides resellers and original equipment manufacturers (“OEMs”) with other sales incentive programs. The Company uses judgment in its assessment of variable consideration in contracts to be included in the transaction price. The Company uses the expected value method to arrive at the amount of variable consideration. The Company believes the estimate of variable consideration is not constrained and that the expected value method is the appropriate estimate of the amount of variable consideration based on the fact that the Company has a large number of contracts with similar characteristics. The Company’s methodology for the estimates is based on several factors, including anticipated price decreases during the reseller holding period, resellers’ sell-through and inventory levels, estimated amounts to be reimbursed to qualifying customers, historical pricing information, historical and anticipated returns information and customer claim processing. The Company also has programs under which it reimburses qualified distributors and retailers for certain marketing expenditures, which are typically recorded as a reduction of the transaction price and, therefore, of revenue.

An immaterial amount of the Company’s revenue arrangements include more than one performance obligation, which are typically comprised of tangible products, software and support services for multiple distinct licenses. For these multiple-element arrangements, the Company evaluates whether each deliverable is a distinct promise and should be accounted for as a separate performance obligation. If a promised good or service is not distinct in accordance with the revenue guidance, the Company combines that good or service with the other promised goods or services in the arrangement until a distinct bundle of goods is identified. The Company allocates the transaction price to the performance obligations of each distinct product or service, or distinct bundle, based on their relative standalone selling prices. Where a separate standalone selling price is not available, the transaction price is based on the Company’s best estimate of the selling price. The Company uses one or a combination of more than one of the following methods to estimate the standalone selling price: the adjusted market assessment approach, the expected cost plus a margin approach, or another suitable method based on the facts and circumstances.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Contract assets represent the Company's rights to consideration where performance obligations are completed but the customer payments are not due until another performance obligation is satisfied. The Company did not have any contract assets as of either December 28, 2018 or the date of adoption of Topic 606.

The Company incurs sales commissions and other direct incremental costs to obtain sales contracts. The Company has applied the practical expedient to recognize the direct incremental costs of obtaining contracts as an expense when incurred if the amortization period is expected to be one year or less or the amount is not material, with these costs charged to selling, general and administrative expenses. Prior to the adoption of the new revenue standard, the Company's policy was to expense all contract acquisition costs as incurred. Other direct incremental costs to obtain contracts that have an expected benefit of greater than one year are amortized over the period of expected cash flows from the related contracts, and the amortization expense is recorded as a reduction to revenue. Total capitalized contract costs and the related amortization as of and for the three and six months ended December 28, 2018 were not material.

Contract liabilities relate to customers' payments in advance of performance under the contract and primarily relate to remaining performance obligations under support and maintenance contracts. As of December 28, 2018 and the date of adoption of Topic 606, contract liabilities were \$53 million and \$120 million, respectively, and were reflected in Accrued expenses. Changes in the contract liability balance during the six months ended December 28, 2018 include \$80 million of revenue recognized during the period of which the substantial majority relates to the balance that was deferred at June 29, 2018, partially offset by payments received and billings in advance of satisfying performance obligations.

The Company applies the practical expedients and does not disclose transaction price allocated to the remaining performance obligations for (i) arrangements that have an original expected duration of one year or less, which mainly consist of the support and maintenance contracts, and (ii) variable consideration amounts for sale-based or usage-based royalties for IP license arrangements, which typically range longer than one year. Remaining performance obligations are mainly attributed to right-to-access patent license arrangements and customer support and service contracts which will be recognized over the remaining contract period. The transaction price allocated to the remaining performance obligations as of December 28, 2018 was \$220 million, which is mainly attributable to the functional IP license and service arrangements. The Company expects to recognize this amount as revenue as follows: \$40 million during the remainder of fiscal 2019, \$60 million in fiscal 2020, \$46 million in fiscal 2021 and \$74 million thereafter.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company's disaggregated revenue information is as follows⁽¹⁾:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions, except percentages)</i>			
Revenue by End Market				
Client Devices	\$ 2,214	\$ 2,647	\$ 4,864	\$ 5,323
Data Center Devices & Solutions	1,074	1,434	2,520	2,803
Client Solutions	945	1,255	1,877	2,391
Total Revenue	\$ 4,233	\$ 5,336	\$ 9,261	\$ 10,517
Revenue by Form Factor				
HDD	\$ 2,060	\$ 2,694	\$ 4,554	\$ 5,304
Flash-based	2,173	2,642	4,707	5,213
Total Revenue	\$ 4,233	\$ 5,336	\$ 9,261	\$ 10,517
Revenue by Geography (%)				
Americas	24%	25%	25%	26%
Europe, Middle East and Africa	19	19	18	18
Asia	57	56	57	56

⁽¹⁾ Prior year information is presented in accordance with the accounting guidance in effect during that period and has not been updated for Topic 606. The impact of the adoption of Topic 606 was not material.

The Company's top 10 customers accounted for 47% of its net revenue for both the three and six months ended December 28, 2018, and 42% and 41% of its net revenue for the three and six months ended December 29, 2017, respectively. For the three and six months ended December 28, 2018 and December 29, 2017, no single customer accounted for 10% or more of the Company's net revenue.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 4. Supplemental Financial Statement Data

Accounts receivable, net

From time to time, in connection with factoring agreements, the Company sells trade accounts receivable without recourse to third party purchasers in exchange for cash. During the six months ended December 28, 2018, the Company sold trade accounts receivable and received cash proceeds of \$370 million. The discounts on the trade accounts receivable sold during the period were not material and were recorded within Other income (expense), net in the Condensed Consolidated Financial Statements. During the six months ended December 29, 2017, the Company did not sell any trade accounts receivable.

Inventories

	December 28, 2018	June 29, 2018
<i>(in millions)</i>		
Inventories:		
Raw materials and component parts	\$ 1,191	\$ 1,048
Work-in-process	864	878
Finished goods	1,372	1,018
Total inventories	\$ 3,427	\$ 2,944

Property, plant and equipment, net

	December 28, 2018	June 29, 2018
<i>(in millions)</i>		
Property, plant, and equipment:		
Land	\$ 307	\$ 306
Buildings and improvements	1,975	1,949
Machinery and equipment	7,493	7,209
Computer equipment and software	450	440
Furniture and fixtures	54	48
Construction-in-process	238	234
Property, plant and equipment, gross	10,517	10,186
Accumulated depreciation	(7,440)	(7,091)
Property, plant, and equipment, net	\$ 3,077	\$ 3,095

Goodwill

	Carrying Amount
<i>(in millions)</i>	
Balance at June 29, 2018	\$ 10,075
Foreign currency translation adjustment	(1)
Balance at December 28, 2018	\$ 10,074

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company tests for impairment, at a minimum, on an annual basis or earlier where certain events or changes in circumstances indicate that goodwill may more likely than not be impaired. The Company has experienced declines in the market price of its stock, resulting in the Company's market capitalization decreasing below book value for the last seven trading days of the second quarter of fiscal 2019. The Company's market capitalization based upon its stock price has fluctuated above and below book value subsequent to the end of the quarter. The fair value of the Company using a market capitalization approach based on the Company's share price would include a control premium based on recent transactions that have occurred in the technology industry. This indicative fair value exceeded the Company's book value; therefore, management does not believe it is more likely than not that goodwill was impaired as of December 28, 2018.

If there are further decreases in the Company's stock price for a sustained period or other unfavorable factors, the Company may be required to perform a goodwill impairment assessment, which may result in a recognition of goodwill impairment that could be material to the Consolidated Financial Statements.

Intangible assets

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
Finite-lived intangible assets	\$ 5,816	\$ 5,818
In-process research and development	80	80
Accumulated amortization	(3,748)	(3,218)
Intangible assets, net	<u>\$ 2,148</u>	<u>\$ 2,680</u>

As part of prior acquisitions, the Company recorded at the time of the acquisition acquired in-process research and development ("IPR&D") for projects in progress that had not yet reached technological feasibility. IPR&D is initially accounted for as an indefinite-lived intangible asset. Once a project reaches technological feasibility, the Company reclassifies the balance to existing technology and begins to amortize the intangible asset over its estimated useful life.

Product warranty liability

Changes in the warranty accrual were as follows:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions)</i>			
Warranty accrual, beginning of period	\$ 323	\$ 302	\$ 318	\$ 311
Charges to operations	47	46	81	90
Utilization	(42)	(43)	(68)	(81)
Changes in estimate related to pre-existing warranties	9	(1)	6	(16)
Warranty accrual, end of period	<u>\$ 337</u>	<u>\$ 304</u>	<u>\$ 337</u>	<u>\$ 304</u>

The current portion of the warranty accrual is classified in Accrued expenses and the long-term portion is classified in Other liabilities as noted below:

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
Warranty accrual		
Current portion	\$ 183	\$ 168
Long-term portion	154	150
Total warranty accrual	<u>\$ 337</u>	<u>\$ 318</u>

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Other liabilities

	December 28, 2018	June 29, 2018
<i>(in millions)</i>		
Other non-current liabilities:		
Non-current net tax payable	\$ 1,018	\$ 1,315
Other non-current liabilities	1,289	940
Total other non-current liabilities	\$ 2,307	\$ 2,255

Accumulated other comprehensive income (loss)

Other comprehensive income (loss) (“OCI”), net of tax refers to expenses, gains and losses that are recorded as an element of shareholders’ equity but are excluded from net income. The following table illustrates the changes in the balances of each component of Accumulated other comprehensive income (loss) (“AOCI”):

	Actuarial Pension Gains (Losses)	Foreign Currency Translation Adjustment	Unrealized Gains (Losses) on Derivative Contracts	Total Accumulated Comprehensive Income (Loss)
<i>(in millions)</i>				
Balance at June 29, 2018	\$ (19)	\$ (21)	\$ 1	\$ (39)
Other comprehensive income (loss) before reclassifications	1	(6)	(5)	(10)
Amounts reclassified from accumulated other comprehensive income	—	—	11	11
Income tax benefit related to items of other comprehensive loss	—	(1)	4	3
Net current-period other comprehensive loss	1	(7)	10	4
Balance at December 28, 2018	\$ (18)	\$ (28)	\$ 11	\$ (35)

During the three and six months ended December 28, 2018 and December 29, 2017, the amounts reclassified out of AOCI related to derivative contracts were not material and substantially all were charged to Cost of revenue in the Condensed Consolidated Statements of Operations.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 5. Fair Value Measurements and Investments

The Company's total cash, cash equivalents and available-for-sale securities was as follows:

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
Cash and cash equivalents	\$ 4,013	\$ 5,005
Short-term available-for-sale securities (included within Other current assets)	23	23
Long-term available-for-sale securities (included within Other non-current assets)	94	93
Total cash, cash equivalents and available-for-sale securities	<u>\$ 4,130</u>	<u>\$ 5,121</u>

Financial Instruments Carried at Fair Value

Financial assets and liabilities that are remeasured and reported at fair value at each reporting period are classified and disclosed in one of the following three levels:

Level 1. Quoted prices in active markets for identical assets or liabilities.

Level 2. Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3. Inputs that are unobservable for the asset or liability and that are significant to the fair value of the assets or liabilities.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following tables present information about the Company's financial assets and liabilities that are measured at fair value on a recurring basis as of December 28, 2018 and June 29, 2018, and indicate the fair value hierarchy of the valuation techniques utilized to determine such values:

	December 28, 2018			
	Level 1	Level 2	Level 3	Total
	<i>(in millions)</i>			
Assets:				
Cash equivalents:				
Money market funds	\$ 1,744	\$ —	\$ —	\$ 1,744
Certificates of deposit	—	3	—	3
Total cash equivalents	1,744	3	—	1,747
Short-term available-for-sale securities:				
Corporate notes and bonds	—	11	—	11
Asset-backed securities	—	7	—	7
Municipal notes and bonds	—	4	—	4
Equity securities	1	—	—	1
Total short-term available-for-sale securities	1	22	—	23
Long-term available-for-sale securities:				
U.S. Treasury securities	7	—	—	7
U.S. Government agency securities	—	5	—	5
International government securities	—	1	—	1
Corporate notes and bonds	—	68	—	68
Asset-backed securities	—	4	—	4
Municipal notes and bonds	—	9	—	9
Total long-term available-for-sale securities	7	87	—	94
Foreign exchange contracts	—	29	—	29
Interest rate swap contracts	—	12	—	12
Total assets at fair value	\$ 1,752	\$ 153	\$ —	\$ 1,905
Liabilities:				
Foreign exchange contracts	\$ —	\$ 26	\$ —	\$ 26
Interest rate swap contract	—	12	—	12
Total liabilities at fair value	\$ —	\$ 38	\$ —	\$ 38

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	June 29, 2018			
	Level 1	Level 2	Level 3	Total
	(in millions)			
Assets:				
Cash equivalents:				
Money market funds	\$ 2,554	\$ —	\$ —	\$ 2,554
Certificates of deposit	—	4	—	4
Total cash equivalents	2,554	4	—	2,558
Short-term available-for-sale securities:				
U.S. Treasury securities	3	—	—	3
Corporate notes and bonds	—	12	—	12
Asset-backed securities	—	4	—	4
Municipal notes and bonds	—	2	—	2
Equity securities	2	—	—	2
Total short-term available-for-sale securities	5	18	—	23
Long-term available-for-sale securities:				
U.S. Treasury securities	3	—	—	3
U.S. Government agency securities	—	5	—	5
International government securities	—	1	—	1
Corporate notes and bonds	—	65	—	65
Asset-backed securities	—	8	—	8
Municipal notes and bonds	—	11	—	11
Total long-term available-for-sale securities	3	90	—	93
Foreign exchange contracts	—	51	—	51
Interest rate swap contracts	—	16	—	16
Total assets at fair value	\$ 2,562	\$ 179	\$ —	\$ 2,741
Liabilities:				
Foreign exchange contracts	\$ —	\$ 28	\$ —	\$ 28
Total liabilities at fair value	\$ —	\$ 28	\$ —	\$ 28

During the three and six months ended December 28, 2018, the Company had no transfers of financial assets and liabilities between levels.

Available-for-Sale Securities

The cost basis of the Company's investments classified as available-for-sale securities, individually and in the aggregate, approximated its fair value as of December 28, 2018 and June 29, 2018.

Equity Securities Without a Readily Determinable Fair Value ("RDFV")

From time to time, the Company enters into certain strategic investments for the promotion of business and strategic objectives. The equity securities of these privately-held companies do not have a RDFV. Under ASU 2016-01, these equity securities are now measured and recorded using the measurement alternative, which is cost minus impairment, if any, plus or minus changes resulting from qualifying observable price changes. In addition, the existing impairment model has been replaced with a new one-step qualitative impairment model. Adjustments resulting from impairments and qualifying observable price changes are recorded in Other income (expense), net in the Condensed Consolidated Statements of Operations. As of December 28, 2018 and June 30, 2018, these investments were not material.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Financial Instruments Not Carried at Fair Value

The carrying value of the Company's revolving credit facility approximates its fair value given the revolving nature of the balance and the variable market interest rate. For financial instruments where the carrying value (which includes principal adjusted for any unamortized issuance costs, and discounts or premiums) differs from fair value (which is based on quoted market prices), the following table represents the related carrying value and fair value for each of the Company's outstanding financial instruments. Each of the financial instruments presented below was categorized as Level 2 for all periods presented, based on the frequency of trading immediately prior to the end of the second quarter of 2019 and the fourth quarter of 2018, respectively.

	December 28, 2018		June 29, 2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	<i>(in millions)</i>			
0.50% convertible senior notes due 2020	\$ 32	\$ 34	\$ 31	\$ 34
Variable interest rate Term Loan A-1 maturing 2023	4,920	4,722	4,982	5,013
Variable interest rate U.S. Term Loan B-4 maturing 2023	2,436	2,333	2,448	2,452
1.50% convertible notes due 2024	944	888	931	1,114
4.750% senior unsecured notes due 2026	2,282	1,994	2,280	2,238
Total	\$ 10,614	\$ 9,971	\$ 10,672	\$ 10,851

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 6. Derivative Instruments and Hedging Activities

As of December 28, 2018, the Company had outstanding foreign exchange forward contracts that were designated as either cash flow hedges or non-designated hedges. Substantially all of the contract maturity dates of these foreign exchange forward contracts do not exceed 12 months. In addition, the Company had outstanding interest rate swaps that were designated as cash flow hedges. The Company did not have any foreign exchange forward contracts with credit-risk-related contingent features. As of December 28, 2018, the amount of existing net gains related to cash flow hedges recorded in AOCI was not material and the majority is expected to be reclassified to earnings over the next twelve months.

Changes in fair values of the non-designated foreign exchange contracts are recognized in Other income (expense), net and are largely offset by corresponding changes in the fair values of the foreign currency denominated monetary assets and liabilities. For each of the three and six months ended December 28, 2018 and December 29, 2017, total net realized and unrealized transaction and foreign exchange contract currency gains and losses were not material to the Company's Condensed Consolidated Financial Statements.

See Note 5, *Fair Value Measurements and Investments*, for additional disclosures related to the fair value of the Company's foreign exchange forward contracts.

Netting Arrangements

Under certain provisions and conditions within agreements with counterparties to the Company's foreign exchange forward contracts, subject to applicable requirements, the Company has the right of offset associated with the Company's foreign exchange forward contracts and is allowed to net settle transactions of the same currency with a single net amount payable by one party to the other. As of December 28, 2018 and June 29, 2018, the effect of rights of offset was not material and the Company did not offset or net the fair value amounts of derivative instruments in its Condensed Consolidated Balance Sheets.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 7. Debt

Debt consisted of the following as of December 28, 2018 and June 29, 2018:

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
0.50% convertible senior notes due 2020	\$ 35	\$ 35
Revolving credit facility maturing 2023	—	500
Variable interest rate Term Loan A-1 maturing 2023	4,928	4,991
Variable interest rate U.S. Term Loan B-4 maturing 2023	2,437	2,449
1.50% convertible notes due 2024	1,100	1,100
4.750% senior unsecured notes due 2026	2,300	2,300
Total debt	10,800	11,375
Issuance costs and debt discounts	(186)	(203)
Subtotal	10,614	11,172
Less current portion of long-term debt	(244)	(179)
Long-term debt	\$ 10,370	\$ 10,993

In November 2018, the Company repaid the previously outstanding borrowings under its revolving credit facility. At December 28, 2018, the Company's borrowing capacity under the revolving credit facility was \$2.25 billion.

The credit agreement governing the Company's revolving credit facility and term loans (as amended, the "Credit Agreement") requires the Company to comply with certain financial covenants with respect to the revolving credit facility and Term Loan A-1, consisting of a Leverage Ratio and an Interest Coverage Ratio (each as defined below). These covenants are based upon a trailing twelve-month consolidated adjusted EBITDA as defined in the Credit Agreement ("Adjusted EBITDA"). Adjusted EBITDA is defined as net income (loss) plus interest expense, income tax expense (benefit) and depreciation and amortization as well as other contractual adjustments as provided for in the Credit Agreement.

Pursuant to the Credit Agreement, the Company is required to maintain a maximum ratio of total funded debt to trailing twelve-month Adjusted EBITDA ("Leverage Ratio") at the end of each quarter of 4.25 to 1.00 through the quarter ending October 4, 2019, 4.00 to 1.00 through the quarter ending October 2, 2020, and 3.75 to 1.00 thereafter. In addition, the Company is required to maintain a minimum ratio of Adjusted EBITDA to interest expense ("Interest Coverage Ratio"), both calculated on a trailing twelve-month basis, at the end of each quarter of 3.50 to 1.00. As of December 28, 2018, the Company was in compliance with all financial covenants under the Credit Agreement.

The Credit Agreement also requires the Company and its subsidiaries to comply with customary covenants that include, among others, limitations on the incurrence of additional debt, liens on property, acquisitions and investments, loans and guarantees, mergers, consolidations, liquidations and dissolutions, asset sales, dividends and other payments in respect of the Company's capital stock, prepayments of certain debt, transactions with affiliates and certain modifications of organizational documents and certain debt agreements. In addition, the indentures governing the Company's 2026 Senior Unsecured Notes and the 2024 Convertible Notes contain restrictive covenants that limit the Company's and its subsidiaries' ability to, among other things, consolidate, merge or sell all or substantially all of their assets; create liens; and incur, assume or guarantee additional indebtedness.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 8. Pension and Other Post-Retirement Benefit Plans

The Company has pension and other post-retirement benefit plans in various countries. The Company's principal pension plans are in Japan. All pension and other post-retirement benefit plans outside of the Company's Japanese defined benefit pension plan (the "Japanese Plan") are immaterial to the Condensed Consolidated Financial Statements. The expected long-term rate of return on the Japanese Plan assets is 2.5%.

Obligations and Funded Status

The following table presents the unfunded status of the benefit obligations for the Japanese Plan:

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
Benefit obligations	\$ 261	\$ 260
Fair value of plan assets	204	200
Unfunded status	<u>\$ 57</u>	<u>\$ 60</u>

The following table presents the unfunded amounts related to the Japanese Plan as recognized on the Company's Condensed Consolidated Balance Sheets:

	December 28, 2018	June 29, 2018
	<i>(in millions)</i>	
Current liabilities	\$ 1	\$ 1
Non-current liabilities	56	59
Net amount recognized	<u>\$ 57</u>	<u>\$ 60</u>

Net periodic benefit costs were not material for the three and six months ended December 28, 2018.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 9. Commitments, Contingencies and Related Parties

Flash Ventures

The Company's business ventures with Toshiba Memory Corporation ("TMC") consist of three separate legal entities: Flash Partners Ltd. ("Flash Partners"), Flash Alliance Ltd. ("Flash Alliance"), and Flash Forward Ltd. ("Flash Forward"), collectively referred to as "Flash Ventures".

The following table presents the notes receivable from, and equity investments in, Flash Ventures as of December 28, 2018 and June 29, 2018:

	December 28, 2018	June 29, 2018
	(in millions)	
Notes receivable, Flash Partners	\$ 695	\$ 767
Notes receivable, Flash Alliance	418	48
Notes receivable, Flash Forward	607	700
Investment in Flash Partners	193	191
Investment in Flash Alliance	286	283
Investment in Flash Forward	119	116
Total notes receivable and investments in Flash Ventures	\$ 2,318	\$ 2,105

During the three and six months ended December 28, 2018, the Company made net payments to Flash Ventures of \$1.12 billion and \$1.86 billion, respectively, for purchased flash-based memory wafers and net loans and investments.

The Company makes, or will make, loans to Flash Ventures to fund equipment investments for new process technologies and additional wafer capacity. The Company aggregates its Flash Ventures' notes receivable into one class of financing receivables due to the similar ownership interest and common structure in each Flash Venture entity. For all reporting periods presented, no loans were past due and no loan impairments were recorded. The Company's notes receivable from each Flash Ventures entity, denominated in Japanese yen, are secured by equipment owned by that Flash Ventures entity.

The Company assesses financing receivable credit quality through financial and operational reviews of the borrower and creditworthiness, including credit rating agency ratings, of significant investors of the borrower, where material or known. There were no impairments in the three and six months ended December 28, 2018 or December 29, 2017.

As of December 28, 2018 and June 29, 2018, the Company had accounts payable balances due to Flash Ventures of \$310 million and \$259 million, respectively.

The Company's maximum reasonably estimable loss exposure (excluding lost profits) as a result of its involvement with Flash Ventures, based upon the Japanese yen to U.S. dollar exchange rate at December 28, 2018, is presented below. Investments in Flash Ventures are denominated in Japanese yen, and the maximum estimable loss exposure excludes any cumulative translation adjustment due to revaluation from the Japanese yen to the U.S. dollar.

	December 28, 2018
Notes receivable	\$ 1,720
Equity investments	598
Operating lease guarantees	1,313
Inventory and prepayments	243
Maximum estimable loss exposure	\$ 3,874

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company is committed to purchase its provided three-month forecast of Flash Ventures' flash-based wafer supply, which generally equals 50% of Flash Ventures' output. In addition, the Company is obligated to pay for half of Flash Ventures' fixed costs regardless of the output the Company chooses to purchase. The Company is not able to estimate its total wafer purchase commitment obligation beyond its rolling three-month purchase commitment because the price is determined by reference to the future cost of producing the semiconductor wafers. In addition, the Company is committed to fund 49.9% to 50.0% of each Flash Ventures entity's capital investments to the extent that each Flash Ventures entity's operating cash flow is insufficient to fund these investments.

Flash Ventures has historically operated near 100% of its manufacturing capacity. As a result of reduced demand for flash-based products, the Company temporarily reduced its utilization of its share of Flash Ventures' manufacturing capacity to an abnormally low level to more closely align the Company's flash-based wafer supply with the projected demand. The Company incurred costs of \$49 million associated with the reduction in utilization which was recorded as a charge to cost of revenue in the three months ended December 28, 2018.

Off-Balance Sheet Liabilities

Flash Ventures sells to and leases back from a consortium of financial institutions a portion of its tools and has entered into equipment lease agreements of which the Company guarantees half or all of the outstanding obligations under each lease agreement. The lease agreements contain customary covenants for Japanese lease facilities. In addition to containing customary events of default related to Flash Ventures that could result in an acceleration of Flash Ventures' obligations, the lease agreements contain acceleration clauses for certain events of default related to the guarantors, including the Company.

The following table presents the Company's portion of the remaining guarantee obligations under the Flash Ventures' lease facilities in both Japanese yen and U.S. dollar-equivalent, based upon the Japanese yen to U.S. dollar exchange rate as of December 28, 2018.

	Lease Amounts	
	(Japanese yen, in billions)	(U.S. dollar, in millions)
Total guarantee obligations	¥ 145	\$ 1,313

The following table details the breakdown of the Company's remaining guarantee obligations between the principal amortization and the purchase option exercise price at the end of the term of the Flash Ventures lease agreements, in annual installments as of December 28, 2018 in U.S. dollars, based upon the Japanese yen to U.S. dollar exchange rate as of December 28, 2018:

Annual Installments	Payment of Principal Amortization	Purchase Option Exercise Price at Final Lease Terms	Guarantee Amount
	(in millions)		
Remaining six months of 2019	\$ 294	\$ 34	\$ 328
2020	294	67	361
2021	207	121	328
2022	112	22	134
2023	49	88	137
Thereafter	4	21	25
Total guarantee obligations	<u>\$ 960</u>	<u>\$ 353</u>	<u>\$ 1,313</u>

The Company and TMC have agreed to mutually contribute to, and indemnify each other and Flash Ventures for, environmental remediation costs or liability resulting from Flash Ventures' manufacturing operations in certain circumstances. The Company has not made any indemnification payments, nor recorded any indemnification receivables, under any such agreements. As of December 28, 2018, no amounts have been accrued in the Condensed Consolidated Financial Statements with respect to these indemnification agreements.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Unis Venture

In November 2015, the Company entered into an agreement with Unisplendour Corporation Limited and Unisoft (Wuxi) Group Co. Ltd. (“Unis”) to form a joint venture, referred to as the “Unis Venture”, to market and sell the Company’s products in China and to develop data storage systems for the Chinese market in the future. The Unis Venture became operational during 2017. The Unis Venture is 49% owned by the Company and 51% owned by Unis. The Company accounts for its investment in the Unis Venture under the equity method of accounting. Revenue on products distributed by the Unis Venture is recognized upon sell through to third-party customers. For the three and six months ended December 28, 2018 and December 29, 2017, the Company recognized less than 1% of its consolidated revenue on products distributed by the Unis Venture. The outstanding accounts receivable due from and investment in the Unis Venture were not material to the Condensed Consolidated Financial Statements as of December 28, 2018 or June 29, 2018.

Purchase Agreements

In the normal course of business, the Company enters into purchase orders with suppliers for the purchase of components used to manufacture its products. These purchase orders generally cover forecasted component supplies needed for production during the next quarter, are recorded as a liability upon receipt of the components, and generally may be changed or canceled at any time prior to shipment of the components. The Company also enters into long-term purchase agreements with various component suppliers that carry fixed volumes and pricing, which obligates the Company to make certain future purchases, contingent on certain conditions of performance, quality and technology of the vendor’s components. As of December 28, 2018, the Company had the following minimum long-term purchase commitments:

Fiscal year	Long-term purchase commitments
	<i>(in millions)</i>
Remaining six months of 2019	\$ 34
2020	193
2021	208
2022	227
2023 and thereafter	250
Total	\$ 912

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 10. Shareholders' Equity
Stock-based Compensation Expense

The following tables present the Company's stock-based compensation for equity-settled awards by type and financial statement line as well as the related tax benefit included in the Company's Condensed Consolidated Statements of Operations:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions)</i>			
Options	\$ 4	\$ 6	\$ 9	\$ 13
Restricted and performance stock units	70	88	137	171
Employee stock purchase plan	5	5	12	12
Subtotal	79	99	158	196
Tax benefit	(14)	(10)	(25)	(34)
Total	\$ 65	\$ 89	\$ 133	\$ 162

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions)</i>			
Cost of revenue	\$ 13	\$ 13	\$ 24	\$ 26
Research and development	42	45	81	89
Selling, general and administrative	24	41	53	81
Subtotal	79	99	158	196
Tax benefit	(14)	(10)	(25)	(34)
Total	\$ 65	\$ 89	\$ 133	\$ 162

Compensation cost related to unvested stock options, restricted stock unit awards ("RSUs"), performance-based restricted stock unit awards ("PSUs"), and rights to purchase shares of common stock under the Company's Employee Stock Purchase Plan ("ESPP") will generally be amortized on a straight-line basis over the remaining average service period. The following table presents the unamortized compensation cost and weighted average service period of all unvested outstanding awards as of December 28, 2018:

	Unamortized Compensation Costs	Weighted Average Service Period
	<i>(in millions)</i>	
		<i>(years)</i>
Options	\$ 15	1.4
RSUs and PSUs ⁽¹⁾	657	2.5
ESPP	71	1.9
Total unamortized compensation cost	\$ 743	

⁽¹⁾ Weighted average service period assumes the performance metrics are met for the PSUs.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Plan Activities
Stock Options

The following table summarizes stock option activity under the Company's incentive plans:

	Number of Shares <i>(in millions)</i>	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life <i>(in years)</i>	Aggregate Intrinsic Value <i>(in millions)</i>
Options outstanding at June 29, 2018	4.8	\$ 64.23		
Exercised	(0.2)	37.64		\$ —
Canceled or expired	(0.3)	79.73		
Options outstanding at December 28, 2018	4.3	\$ 64.73	3.3	\$ 1
Exercisable at December 28, 2018	3.1	\$ 69.86	2.9	\$ 1

RSUs and PSUs

The following table summarizes RSU and PSU activity under the Company's incentive plans:

	Number of Shares <i>(in millions)</i>	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value at Vest Date <i>(in millions)</i>
RSUs and PSUs outstanding at June 29, 2018	12.6	\$ 58.31	
Granted	6.6	59.42	
Vested	(3.1)	61.96	\$ 211
Forfeited	(0.7)	56.05	
RSUs and PSUs outstanding at December 28, 2018	15.4	\$ 59.51	

RSUs and PSUs are generally settled in an equal number of shares of the Company's common stock at the time of vesting of the units.

Stock Repurchase Program

The Company's Board of Directors previously authorized \$5.00 billion for the repurchase of the Company's common stock. On July 25, 2018, the Company's Board of Directors authorized a new \$5.00 billion share repurchase program that is effective through July 25, 2023, replacing all prior programs. For the three months ended December 28, 2018, the Company did not make any stock repurchases. For the six months ended December 28, 2018, the Company repurchased 0.8 million shares for a total cost of \$61 million under the previous authorization and 7.6 million shares for a total cost of \$502 million under the new authorization. Therefore, the Company's stock repurchases under all stock repurchase authorizations in effect for the six months ended December 28, 2018 totaled \$563 million. The remaining amount available to be repurchased under the Company's current stock repurchase program as of December 28, 2018 was \$4.50 billion. Repurchases under the stock repurchase program may be made in the open market or in privately negotiated transactions and may be made under a Rule 10b5-1 plan. The Company expects stock repurchases to be funded principally by operating cash flows.

Dividends to Shareholders

Since the first quarter of 2013, the Company has issued a quarterly cash dividend. During the six months ended December 28, 2018, the Company declared aggregate cash dividends of \$1.00 per share on its outstanding common stock totaling \$290 million, of which \$146 million was paid on January 14, 2019.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 11. Income Tax Expense

The 2017 Act, enacted on December 22, 2017, includes a broad range of tax reform proposals affecting businesses, including a reduction in the U.S. federal corporate tax rate from 35% to 21%, a one-time mandatory deemed repatriation tax on earnings of certain foreign subsidiaries that were previously tax deferred and the creation of new taxes on certain foreign earnings.

When initially accounting for the tax effects of the enactment of the 2017 Act, the Company applied the applicable SEC guidance and made a reasonable estimate of the effects on the Company's existing deferred tax balances and the one-time mandatory deemed repatriation tax required by the 2017 Act. As the Company finalized the accounting for the tax effects of the enactment of the 2017 Act during the one-year measurement period permitted by applicable SEC guidance, the Company reflected adjustments to the recorded provisional amounts. As of December 28, 2018, the Company completed its accounting for the tax effects of the enactment of the 2017 Act. Although the U.S. Treasury and the Internal Revenue Service ("IRS") have issued tax guidance on certain provisions of the 2017 Act since the enactment date, the Company anticipates the issuance of additional regulatory and interpretive guidance. Although the Company was able to apply a reasonable interpretation of the law along with any available guidance in finalizing its accounting for the tax effects of the 2017 Act, such additional regulatory or interpretive guidance would constitute new information which may require further refinements to its estimates in future periods.

Additional information regarding the significant provisions of the 2017 Act that impacted the Company is provided below.

Re-measurement of deferred taxes

The Company recorded a provisional income tax benefit of \$65 million for the year ended June 29, 2018, which related to the re-measurements of the Company's deferred tax balances and is based primarily on the rates at which the deferred tax assets and liabilities are expected to reverse in the current and future fiscal years, which are generally 29% and 22%, respectively. The Company has now finalized the accounting for the tax effects related to the re-measurements of the Company's deferred tax balances with no material change for the six months ended December 28, 2018. The Company has not yet finalized the filing of its U.S. federal income tax return for the year ended June 29, 2018, which may affect the re-measurement of the Company's deferred tax balances.

Mandatory deemed repatriation tax

In connection with the transition from a global to a territorial U.S. tax system, companies are required to pay a mandatory deemed repatriation tax. For the year ended June 29, 2018, the Company recorded a provisional amount for the mandatory deemed repatriation tax liability of \$1.57 billion for foreign subsidiaries. The calculation of the mandatory deemed repatriation tax liability is based upon post-1986 earnings and profits. In addition, the mandatory deemed repatriation tax is based on the amount of foreign earnings held in cash and other specified assets, which are taxed at 15.5% and 8%, respectively, and is payable over an 8-year period.

As of December 28, 2018, the Company has finalized the accounting for the tax effects of the mandatory deemed repatriation tax during the one-year measurement period permitted by applicable SEC guidance. During the three months ended September 28, 2018, the Company reduced its mandatory deemed repatriation tax liability by \$302 million, of which \$250 million was for the utilization of recorded deferred tax assets related to existing tax attributes. The utilization of the deferred tax assets is a reclassification that did not have an impact on the Company's income tax provision for the three months ended September 28, 2018. The remaining \$52 million reduction to the mandatory deemed repatriation tax primarily relates to the Company's decision to no longer carry forward its 2018 operating loss and, instead, apply it against the mandatory deemed repatriation tax. The \$52 million benefit results from utilizing the existing fiscal year 2018 operating losses at a 28% tax rate on the Company's 2018 tax return as compared to the carryforward tax rate of 21%.

During the three months ended December 28, 2018, the Company also finalized its post-1986 earnings and profits along with the amount of earnings held in cash and other specified assets and increased its mandatory deemed repatriation tax liability by \$95 million. The Company's estimate of the mandatory deemed repatriation tax liability after these refinements is \$1.36 billion, excluding a \$135 million increase in its liability for unrecognized tax benefits.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

On January 15, 2019, the IRS issued final regulations with respect to the mandatory deemed repatriation tax liability. The Company believes this guidance constitutes a subsequent event and will account for the impact of these regulations in the period in which they were issued. These regulations may impact certain positions previously taken with respect to amounts recorded in the Company's Consolidated Financial Statements. The Company may adjust such amounts to reflect the final regulations in its Condensed Consolidated Financial Statements for the period ending March 28, 2019.

During the one-year measurement period, the Company evaluated the expected manner of recovery to determine whether or not to continue to assert indefinite reinvestment on a part or all the foreign undistributed earnings. This required the Company to re-evaluate its existing short and long-term capital allocation policies in light of the 2017 Act and calculate the tax cost that is incremental to the deemed repatriation tax of repatriating cash to the U.S. The provisional tax expense recorded by the Company as of June 28, 2018 was based upon an assumption that all of its foreign undistributed earnings are indefinitely reinvested.

As of December 28, 2018, the Company finalized the accounting for the tax effects of the mandatory deemed repatriation tax on its indefinite reinvestment assertion. The Company now intends to repatriate all of its foreign undistributed earnings. Accordingly, during the six months ended December 28, 2018, the Company recorded a foreign income tax expense of \$242 million related to foreign withholding taxes partially offset by foreign tax credits of \$82 million. In addition, a state income tax expense of \$54 million was recorded, partially offset by a decrease to the Company's valuation allowance of \$45 million. Amounts related to federal taxes other than the repatriation tax were not material. The Company's decision to change its indefinite reinvestment assertion is based on interpretative guidance issued by the IRS to date related to the ordering and the taxation of a repatriation of the Company's foreign undistributed earnings.

Deferred taxes on foreign earnings

As a result of the shift to a territorial system for U.S. taxation, the new minimum tax on certain foreign earnings ("global intangible low-tax income") provision of the 2017 Act imposes a tax on foreign earnings and profits in excess of a deemed return on tangible assets of foreign subsidiaries. This provision is effective for tax years beginning on or after January 1, 2018, which for the Company is the fiscal year that began on June 30, 2018 (fiscal year 2019). During the one-year measurement period permitted by applicable SEC guidance, the Company evaluated its accounting policy regarding whether to make an election to account for the effects of this provision either as a component of future income tax expense in the period in which the tax arises or as a component of deferred taxes on the related investments. Accordingly, no deferred tax assets and liabilities were established for timing differences between foreign U.S. GAAP income and U.S. taxable income that would be expected to reverse under the new minimum tax in future years for the year ended June 28, 2018.

After further consideration during the six months ended December 28, 2018, the Company has made the election to account for the effects of the global intangible low-tax income provision as a component of future income tax expense in the period in which the tax arises. As the Company had previously accounted for the tax as a period cost in its income tax provision for the three months ended September 28, 2018, there was no change in the Company's accounting as a result of this election.

The following table presents the Company's income tax expense and the effective tax rate, which includes the discrete effects of the finalization of the accounting for the tax effects of the enactment of the 2017 Act as discussed above:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions)</i>			
Income before taxes	\$ 81	\$ 774	\$ 664	\$ 1,484
Income tax expense	\$ 568	\$ 1,597	\$ 640	\$ 1,626
Effective tax rate	701%	206%	96%	110%

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The primary driver of the difference between the effective tax rate for the three and six months ended December 28, 2018 and the U.S. Federal statutory rate of 21% is the discrete effect of the finalization of the accounting for the tax effects of the enactment of the 2017 Act. For the three months ended December 28, 2018, these discrete effects consist of \$230 million related to the mandatory deemed repatriation tax and \$134 million related to the Company's decision to change its indefinite reinvestment assertion. For the six months ended December 28, 2018, these discrete effects consist of \$178 million related to the mandatory deemed repatriation tax and \$144 million related to the Company's decision to change its indefinite reinvestment assertion. For both periods, the remaining difference is attributable primarily to the changes in the relative mix of our U.S. earnings compared to foreign earnings.

The primary drivers for the difference between the effective tax rate for the three and six months ended December 29, 2017 and the U.S. Federal statutory rate of 28% are related to the net charge of \$1.66 billion for the one-time mandatory deemed repatriation tax, offset in part by an income tax benefit related to the re-measurement of deferred taxes as required by the 2017 Act. Excluding these items, the effective tax rate for the three and six months ended December 29, 2017 would be approximately 4%. The primary drivers for the remaining difference between the effective tax rate for the three and six months ended December 29, 2017 and the U.S. Federal statutory rate of 28% are tax credits generated for 2017, and tax holidays in Malaysia, Philippines, Singapore and Thailand that expire at various dates during fiscal years 2018 through 2030 and windfall tax benefits related to vesting and exercises of stock-based awards. The windfall tax benefits are a result of the adoption of ASU 2016-09, which requires the Company to now recognize \$5 million and \$27 million of windfall tax benefits related to vesting and exercises of stock-based awards as a component of its income tax expense for the three and six months ended December 29, 2017, respectively.

During the six months ended December 28, 2018, the Company recorded an increase of \$139 million in its liability for unrecognized tax benefits (excluding accrued interest and penalties). As of December 28, 2018, the Company's liability for unrecognized tax benefits (excluding accrued interest and penalties) was approximately \$690 million. Accrued interest and penalties related to unrecognized tax benefits as of December 28, 2018 was \$116 million.

The Internal Revenue Service ("IRS") previously completed its field examination of the Company's federal income tax returns for fiscal years 2008 through 2012 and proposed certain adjustments. As previously disclosed, the Company received Revenue Agent Reports from the IRS for fiscal years 2008 through 2009, proposing adjustments relating to transfer pricing with the Company's foreign subsidiaries and intercompany payable balances. The Company disagrees with the proposed adjustments and in September 2015, filed a protest with the IRS Appeals Office and received the IRS rebuttal in July 2016. The Company and the IRS Appeals Office did not reach a settlement on the disputed matters. On June 28, 2018, the IRS issued a statutory notice of deficiency with respect to the disputed matters for fiscal years 2008 through 2009, seeking to increase the Company's U.S. taxable income by an amount that would result in additional federal tax through fiscal year 2009 totaling approximately \$516 million, subject to interest. The Company filed a petition with the U.S. Tax Court in September 2018. On December 10, 2018, the IRS issued a statutory notice of deficiency with respect to fiscal years 2010 through 2012, seeking to increase the Company's U.S. taxable income by an amount that would result in additional federal tax for fiscal years 2010 through 2012 totaling approximately \$549 million, subject to interest. Approximately \$535 million of the total additional federal tax relates to proposed adjustments for transfer pricing with the Company's foreign subsidiaries, intercompany payable balances and the utilization of certain tax attributes. The Company plans to file a petition with the U.S. Tax Court by March 2019. The Company believes that its tax positions are properly supported and will vigorously contest the position taken by the IRS.

The Company believes that adequate provision has been made for any adjustments that may result from tax examinations. However, the outcome of tax examinations cannot be predicted with certainty. If any issues addressed in the Company's tax examinations are resolved in a manner not consistent with management's expectations, the Company could be required to adjust its provision for income taxes in the period such resolution occurs. As of December 28, 2018, it was not possible to estimate the amount of change, if any, in the unrecognized tax benefits that is reasonably possible within the next twelve months. Any significant change in the amount of the Company's liability for unrecognized tax benefits would most likely result from additional information or settlements relating to the examination of the Company's tax returns.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 12. Net Income (Loss) Per Common Share

The following table presents the computation of basic and diluted income (loss) per common share:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions, except per share data)</i>			
Net income (loss)	\$ (487)	\$ (823)	\$ 24	\$ (142)
Weighted average shares outstanding:				
Basic	290	296	291	295
Employee stock options, RSUs, PSUs and ESPP	—	—	5	—
Diluted	290	296	296	295
Income (loss) per common share				
Basic	\$ (1.68)	\$ (2.78)	\$ 0.08	\$ (0.48)
Diluted	\$ (1.68)	\$ (2.78)	\$ 0.08	\$ (0.48)

The Company computes basic income (loss) per common share using net income (loss) and the weighted average number of common shares outstanding during the period. Diluted income per common share is computed using net income (loss) and the weighted average number of common shares and potentially dilutive common shares outstanding during the period. Potentially dilutive common shares include dilutive outstanding employee stock options, RSUs and PSUs, and rights to purchase shares of common stock under the Company's ESPP. For the six months ended December 28, 2018, the Company excluded 8 million common shares subject to outstanding equity awards from the calculation of diluted shares because their impact would have been anti-dilutive based on the Company's average stock price during the period. For the three months ended December 28, 2018 and the three and six months ended December 29, 2017, the Company reported a net loss, and all outstanding equity awards have been excluded from such periods because including them would be anti-dilutive. See Note 10, *Shareholders' Equity*.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 13. Employee Termination, Asset Impairment and Other Charges

The Company recorded the following charges related to employee terminations benefits, asset impairment, and other charges:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
	<i>(in millions)</i>			
Employee termination and other charges:				
Restructuring Plan 2016	\$ —	\$ 32	\$ —	\$ 77
Closure of Foreign Manufacturing Facilities	7	—	11	—
Business Realignment	13	16	55	23
Total employee termination and other charges	\$ 20	\$ 48	\$ 66	\$ 100

Closure of Foreign Manufacturing Facilities

In July 2018, the Company announced the closing of its HDD manufacturing facility in Kuala Lumpur, Malaysia, in order to reduce its manufacturing costs and consolidate HDD operations into Thailand. The Company now currently expects the closure to be substantially completed by the fourth quarter of fiscal 2019 and to result in total pre-tax charges of approximately \$110 million. These charges are expected to consist of approximately \$70 million in employee termination benefits and \$40 million in asset-related, contract termination and other charges, of which \$56 million were recognized in the year ended June 29, 2018. During the six months ended December 28, 2018, the Company recognized an additional \$3 million in employee termination benefits and \$8 million in asset-related, contract termination and other charges.

The following table presents an analysis of the components of the restructuring charges, payments and adjustments made against the reserve during the six months ended December 28, 2018:

	Employee Termination Benefits	Contract Termination and Other	Total
		<i>(in millions)</i>	
Accrual balance at June 29, 2018	\$ 56	\$ —	\$ 56
Charges	3	8	11
Cash payments	—	(5)	(5)
Accrual balance at December 28, 2018	\$ 59	\$ 3	\$ 62

Business Realignment

The Company periodically incurs charges as part of the integration process of recent acquisitions and to realign its operations with anticipated market demand. The following table presents an analysis of the components of the activity against the reserve during the six months ended December 28, 2018:

	Employee Termination Benefits	Contract Termination and Other	Total
		<i>(in millions)</i>	
Accrual balance at June 29, 2018	\$ 36	\$ 7	\$ 43
Charges	46	9	55
Cash payments	(35)	(5)	(40)
Accrual balance at December 28, 2018	\$ 47	\$ 11	\$ 58

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 14. Legal Proceedings

Unless otherwise stated below, for each of the matters described below, the Company has either recorded an accrual for losses that are probable and reasonably estimable or has determined that, while a loss is reasonably possible (including potential losses in excess of the amounts accrued by the Company), a reasonable estimate of the amount of loss or range of possible losses with respect to the claim or in excess of amounts already accrued by the Company cannot be made. The ability to predict the ultimate outcome of such matters involves judgments, estimates and inherent uncertainties. The actual outcome of such matters could differ materially from management's estimates.

Solely for purposes of this note, "WD" refers to Western Digital Corporation or one or more of its subsidiaries excluding HGST prior to the closing of the Company's acquisition of HGST on March 8, 2012 (the "HGST Closing Date") and SanDisk prior to the Company's acquisition of SanDisk on May 12, 2016 (the "SanDisk Closing Date"); "HGST" refers to Hitachi Global Storage Technologies Holdings Pte. Ltd. or one or more of its subsidiaries as of the HGST Closing Date; "SanDisk" refers to SanDisk Corporation or one or more of its subsidiaries as of the SanDisk Closing Date; and "the Company" refers to Western Digital Corporation and all of its subsidiaries on a consolidated basis including HGST and SanDisk.

Intellectual Property Litigation

In May 2016, Lambeth Magnetic Structures, LLC ("Lambeth") filed a complaint with the U.S. District Court for the Western District of Pennsylvania against WD and certain of its subsidiaries alleging infringement of U.S. Patent No. 7,128,988. The complaint seeks unspecified monetary damages and injunctive relief. The '988 patent, entitled "Magnetic Material Structures, Devices and Methods," allegedly relates to a magnetic material structure for hard disk drive devices. The Company intends to defend itself vigorously in this matter.

Antitrust

In March 2011, a complaint was filed against SanDisk, SD-3C LLC, Panasonic Corporation, Panasonic Corporation of North America, Toshiba Corporation and Toshiba America Electronic Components, Inc. with the U.S. District Court for the Northern District of California. The lawsuit purports to be on behalf of a nationwide class of indirect purchasers of SD cards. The complaint asserts claims under federal antitrust laws and California antitrust and unfair competition laws, as well as common law claims. The complaint seeks damages, restitution, injunctive relief, and fees and costs. The plaintiffs allege that the defendants conspired to artificially inflate the royalty costs associated with manufacturing SD cards, which in turn allegedly caused the plaintiffs to pay higher prices for SD cards. In November 2015, the defendants filed a motion to dismiss the plaintiffs' federal law claims. In October 2016, the District Court granted the defendants' motion with leave to amend and the defendants filed a motion to dismiss the plaintiffs' remaining claims. In July 2018, ten of the thirteen named plaintiffs voluntarily dismissed their claims against the defendants. In December 2018, the remaining three plaintiffs stipulated to dismiss their claims against the defendants.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Securities

Beginning in March 2015, SanDisk and two of its officers, Sanjay Mehrotra and Judy Bruner, were named in three putative class action lawsuits filed with the U.S. District Court for the Northern District of California. Two complaints are brought on behalf of a purported class of purchasers of SanDisk's securities between October 2014 and March 2015, and one is brought on behalf of a purported class of purchasers of SanDisk's securities between April 2014 and April 2015. The complaints generally allege violations of federal securities laws arising out of alleged misstatements or omissions by the defendants during the alleged class periods. The complaints seek, among other things, damages and fees and costs. In July 2015, the District Court consolidated the cases and appointed Union Asset Management Holding AG and KBC Asset Management NV as lead plaintiffs. The lead plaintiffs filed an amended complaint in August 2015. In January 2016, the District Court granted the defendants' motion to dismiss and dismissed the amended complaint with leave to amend. In February 2016, the District Court issued an order appointing as new lead plaintiffs Bristol Pension Fund; City of Milford, Connecticut Pension & Retirement Board; Pavers and Road Builders Pension, Annuity and Welfare Funds; the Newport News Employees' Retirement Fund; and Massachusetts Laborers' Pension Fund (collectively, the "Institutional Investor Group"). In March 2016, the Institutional Investor Group filed an amended complaint. In June 2016, the District Court granted the defendants' motion to dismiss and dismissed the amended complaint with leave to amend. In July 2016, the Institutional Investor Group filed a further amended complaint. In June 2017, the District Court denied the defendants' motion to dismiss. In September 2018, the District Court granted the Institutional Investor Group's motion to certify a class of all persons and entities who purchased or otherwise acquired SanDisk's publicly traded common stock between October 2014 and April 2015, excluding those who purchased or otherwise acquired SanDisk's publicly traded common stock during the class period but who sold their stock prior to the first corrective disclosure in March 2015. The Institutional Investor Group alleges artificial inflation in the price of SanDisk's publicly traded common stock of \$9.04 per share from October 16, 2014 through March 25, 2015, \$2.26 per share on March 26, 2015, and \$1.35 per share from March 27, 2015 through April 15, 2015. The Company believes the allegations to be without merit and intends to defend itself vigorously in this matter.

Copyright

In December 2011, the German Central Organization for Private Copying Rights (Zentralstelle für private Überspielungsrechte) ("ZPÜ"), an organization consisting of several copyright collecting societies, instituted arbitration proceedings against WD's German subsidiary ("WD Germany") before the Copyright Arbitration Board ("CAB") claiming copyright levies for multimedia hard drives, external hard drives and network hard drives sold or introduced into commerce in Germany by WD Germany from January 2008 through December 2010. In February 2013, WD Germany filed a declaratory relief action against ZPÜ in the Higher Regional Court of Munich (the "Higher Court"), seeking an order from the Higher Court to determine the copyright levy issue. In May 2013, ZPÜ filed a counter-claim against WD Germany with the Higher Court, seeking copyright levies for multimedia hard drives, external hard drives and network hard drives sold or introduced into commerce from January 2008 through December 2010 based on tariffs published by ZPÜ in November 2011. In January 2015, the Higher Court ruled in favor of ZPÜ. In its ruling, the Higher Court declared that WD Germany must pay certain levies on certain products that it sold in Germany between January 2008 and December 2010. The judgment specified levy amounts on certain products sold from January 2008 through December 2010 and directed WD Germany to disclose applicable sales data to ZPÜ. The exact amount of the judgment had not been determined. ZPÜ and WD Germany filed appeals with the German Federal Court of Justice in February 2015. In March 2017, the German Federal Court of Justice rendered a judgment affirming ZPÜ's claim concerning the disclosure of WD Germany's sales data regarding HDDs sold between January 2008 and December 2010. The German Federal Court of Justice also set aside the Higher Court's decision on the levy amounts and referred the case back to the Higher Court for further fact finding and decision on the levy amounts.

In December 2014, ZPÜ submitted a pleading to the CAB seeking copyright levies for multimedia hard drives, external hard drives and network hard drives sold or introduced into commerce in Germany by WD Germany between January 2012 and December 2013.

On or around June 22, 2018, Bitkom, an industry association, and ZPÜ entered into an agreement for regulating the obligation to pay compensation under copyright law in Germany for hard drives for the period beginning January 1, 2008. On or around June 29, 2018, the Company elected to join the agreement. Pursuant to the agreement, all court proceedings have been terminated. The entry into this agreement did not have a material impact on the Company's financial condition, results of operations or cash flows.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Tax

For disclosures regarding statutory notices of deficiency issued by the IRS on June 28, 2018 and December 10, 2018, and a petition filed by the Company with the U.S. Tax Court in September 2018, see Note 11, *Income Tax Expense*.

Other Matters

In the normal course of business, the Company is subject to other legal proceedings, lawsuits and other claims. Although the ultimate aggregate amount of probable monetary liability or financial impact with respect to these other matters is subject to many uncertainties, management believes that any monetary liability or financial impact to the Company from these other matters, individually and in the aggregate, would not be material to the Company's financial condition, results of operations or cash flows. However, any monetary liability and financial impact to the Company from these other matters could differ materially from the Company's expectations.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 15. Separate Financial Information of Guarantor Subsidiaries

The Company's senior unsecured notes due 2026 (the "2026 Senior Unsecured Notes") are fully and unconditionally guaranteed, jointly and severally, on a senior unsecured basis, subject to certain customary guarantor release conditions, by certain 100% owned material domestic subsidiaries of the Company (or the "Guarantor Subsidiaries"). The guarantee by a Guarantor Subsidiary will be released in the event of (i) the release of a Guarantor Subsidiary from its guarantee of indebtedness under the credit agreement or other indebtedness that would have required the Guarantor Subsidiary to guarantee the 2026 Senior Unsecured Notes, (ii) the sale, issuance or other disposition of capital stock of a Guarantor Subsidiary such that it is no longer a restricted subsidiary under the indenture governing the 2026 Senior Unsecured Notes, (iii) the sale of all or substantially all of a Guarantor Subsidiary's assets, (iv) the Company's exercise of its defeasance options under the indenture governing the 2026 Senior Unsecured Notes, (v) the dissolution or liquidation of a Guarantor Subsidiary or (vi) the sale of all the equity interest in a Guarantor Subsidiary. The Company's other domestic subsidiaries and its foreign subsidiaries (collectively, the "Non-Guarantor Subsidiaries") do not guarantee the 2026 Senior Unsecured Notes. The following condensed consolidating financial information reflects the summarized financial information of Western Digital Corporation ("Parent"), the Guarantor Subsidiaries on a combined basis, and the Non-Guarantor Subsidiaries on a combined basis.

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Balance Sheet
As of December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
<i>(in millions)</i>					
ASSETS					
Current assets:					
Cash and cash equivalents	\$ 17	\$ 1,163	\$ 2,833	\$ —	\$ 4,013
Accounts receivable, net	—	873	842	—	1,715
Intercompany receivables	2,474	4,971	2,215	(9,660)	—
Inventories	—	1,165	2,495	(233)	3,427
Loans due from consolidated affiliates	—	—	40	(40)	—
Other current assets	15	248	324	—	587
Total current assets	2,506	8,420	8,749	(9,933)	9,742
Property, plant and equipment, net	—	1,056	2,021	—	3,077
Notes receivable and investments in Flash Ventures	—	—	2,318	—	2,318
Goodwill	—	388	9,686	—	10,074
Other intangible assets, net	—	33	2,115	—	2,148
Investments in consolidated subsidiaries	21,070	17,984	—	(39,054)	—
Loans due from consolidated affiliates	—	386	—	(386)	—
Other non-current assets	57	49	484	(10)	580
Total assets	\$ 23,633	\$ 28,316	\$ 25,373	\$ (49,383)	\$ 27,939
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$ —	\$ 217	\$ 1,708	\$ —	\$ 1,925
Accounts payable to related parties	—	—	310	—	310
Intercompany payables	1,548	4,161	3,951	(9,660)	—
Accrued expenses	206	640	680	—	1,526
Accrued compensation	—	208	137	—	345
Loans due to consolidated affiliates	—	40	—	(40)	—
Current portion of long-term debt	244	—	—	—	244
Total current liabilities	1,998	5,266	6,786	(9,700)	4,350
Long-term debt	10,338	—	32	—	10,370
Loans due to consolidated affiliates	370	—	16	(386)	—
Other liabilities	15	1,777	525	(10)	2,307
Total liabilities	12,721	7,043	7,359	(10,096)	17,027
Total shareholders' equity	10,912	21,273	18,014	(39,287)	10,912
Total liabilities and shareholders' equity	\$ 23,633	\$ 28,316	\$ 25,373	\$ (49,383)	\$ 27,939

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Balance Sheet
As of June 29, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
ASSETS					
Current assets:					
Cash and cash equivalents	\$ 40	\$ 668	\$ 4,297	\$ —	\$ 5,005
Accounts receivable, net	—	1,358	839	—	2,197
Intercompany receivables	1,903	4,256	2,674	(8,833)	—
Inventories	—	990	2,159	(205)	2,944
Other current assets	20	195	277	—	492
Total current assets	1,963	7,467	10,246	(9,038)	10,638
Property, plant and equipment, net	—	1,092	2,003	—	3,095
Notes receivable and investments in Flash Ventures	—	—	2,105	—	2,105
Goodwill	—	387	9,688	—	10,075
Other intangible assets, net	—	38	2,642	—	2,680
Investments in consolidated subsidiaries	20,847	19,893	—	(40,740)	—
Loans due from consolidated affiliates	943	16	—	(959)	—
Other non-current assets	182	29	431	—	642
Total assets	\$ 23,935	\$ 28,922	\$ 27,115	\$ (50,737)	\$ 29,235
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$ —	\$ 279	\$ 1,986	\$ —	\$ 2,265
Accounts payable to related parties	—	—	259	—	259
Intercompany payables	1,066	4,648	3,119	(8,833)	—
Accrued expenses	198	505	571	—	1,274
Accrued compensation	—	297	182	—	479
Current portion of long-term debt	179	—	—	—	179
Total current liabilities	1,443	5,729	6,117	(8,833)	4,456
Long-term debt	10,962	—	31	—	10,993
Loans due to consolidated affiliates	—	427	532	(959)	—
Other liabilities	(1)	1,768	488	—	2,255
Total liabilities	12,404	7,924	7,168	(9,792)	17,704
Total shareholders' equity	11,531	20,998	19,947	(40,945)	11,531
Total liabilities and shareholders' equity	\$ 23,935	\$ 28,922	\$ 27,115	\$ (50,737)	\$ 29,235

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Operations
For the three months ended December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Revenue, net	\$ —	\$ 3,392	\$ 4,857	\$ (4,016)	\$ 4,233
Cost of revenue	—	2,942	4,215	(3,968)	3,189
Gross profit	—	450	642	(48)	1,044
Operating expenses:					
Research and development	—	334	205	—	539
Selling, general and administrative	—	214	95	—	309
Intercompany operating expense (income)	—	(347)	347	—	—
Employee termination, asset impairment, and other charges	—	6	14	—	20
Total operating expenses	—	207	661	—	868
Operating income (loss)	—	243	(19)	(48)	176
Interest and other income (expense):					
Interest income	2	4	12	(3)	15
Interest expense	(118)	(2)	(1)	3	(118)
Other income (expense), net	—	(2)	8	2	8
Total interest and other income (expense), net	(116)	—	19	2	(95)
Income (loss) before taxes	(116)	243	—	(46)	81
Equity in earnings from subsidiaries	(468)	(133)	—	601	—
Income tax expense (benefit)	(97)	532	133	—	568
Net loss	\$ (487)	\$ (422)	\$ (133)	\$ 555	\$ (487)

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Operations
For the six months ended December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Revenue, net	\$ —	\$ 6,877	\$ 9,853	\$ (7,469)	\$ 9,261
Cost of revenue	—	5,947	8,039	(7,433)	6,553
Gross profit	—	930	1,814	(36)	2,708
Operating expenses:					
Research and development	—	697	418	—	1,115
Selling, general and administrative	1	465	199	—	665
Intercompany operating expense (income)	—	(754)	754	—	—
Employee termination, asset impairment, and other charges	—	38	28	—	66
Total operating expenses	1	446	1,399	—	1,846
Operating income (loss)	(1)	484	415	(36)	862
Interest and other income (expense):					
Interest income	10	7	24	(11)	30
Interest expense	(234)	(8)	(3)	11	(234)
Other income (expense), net	1	(2)	7	—	6
Total interest and other income (expense), net	(223)	(3)	28	—	(198)
Income (loss) before taxes	(224)	481	443	(36)	664
Equity in earnings from subsidiaries	7	212	—	(219)	—
Income tax expense (benefit)	(241)	650	231	—	640
Net income	\$ 24	\$ 43	\$ 212	\$ (255)	\$ 24

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Operations
For the three months ended December 29, 2017

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Revenue, net	\$ —	\$ 3,764	\$ 5,173	\$ (3,601)	\$ 5,336
Cost of revenue	—	3,256	3,703	(3,636)	3,323
Gross profit	—	508	1,470	35	2,013
Operating expenses:					
Research and development	—	400	229	—	629
Selling, general and administrative	1	276	104	—	381
Intercompany operating expense (income)	—	(430)	430	—	—
Employee termination, asset impairment, and other charges	—	10	38	—	48
Total operating expenses	1	256	801	—	1,058
Operating income (loss)	(1)	252	669	35	955
Interest and other income (expense):					
Interest income	66	2	12	(66)	14
Interest expense	(197)	(4)	(62)	66	(197)
Other income (expense), net	—	(4)	6	—	2
Total interest and other expense, net	(131)	(6)	(44)	—	(181)
Income (loss) before taxes	(132)	246	625	35	774
Equity in earnings from subsidiaries	(725)	593	—	132	—
Income tax expense (benefit)	(34)	1,601	30	—	1,597
Net income (loss)	\$ (823)	\$ (762)	\$ 595	\$ 167	\$ (823)

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Operations
For the six months ended December 29, 2017

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Revenue, net	\$ —	\$ 7,474	\$ 10,254	\$ (7,211)	\$ 10,517
Cost of revenue	—	6,456	7,350	(7,215)	6,591
Gross profit	—	1,018	2,904	4	3,926
Operating expenses:					
Research and development	—	781	440	—	1,221
Selling, general and administrative	3	534	208	—	745
Intercompany operating expense (income)	—	(830)	830	—	—
Employee termination, asset impairment, and other charges	—	21	79	—	100
Total operating expenses	3	506	1,557	—	2,066
Operating income (loss)	(3)	512	1,347	4	1,860
Interest and other income (expense):					
Interest income	147	4	26	(147)	30
Interest expense	(401)	(10)	(138)	147	(402)
Other income (expense), net	(8)	7	(3)	—	(4)
Total interest and other income (expense), net	(262)	1	(115)	—	(376)
Income (loss) before taxes	(265)	513	1,232	4	1,484
Equity in earnings from subsidiaries	32	1,185	—	(1,217)	—
Income tax expense (benefit)	(91)	1,655	62	—	1,626
Net income (loss)	\$ (142)	\$ 43	\$ 1,170	\$ (1,213)	\$ (142)

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Comprehensive Income (Loss)
For the three months ended December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Net loss	\$ (487)	\$ (422)	\$ (133)	\$ 555	\$ (487)
Other comprehensive income, before tax:					
Actuarial pension gain	1	1	1	(2)	1
Foreign currency translation adjustment	31	32	32	(64)	31
Net unrealized gain, on derivative contracts and available-for-sale securities	7	30	30	(60)	7
Total other comprehensive income, before tax	39	63	63	(126)	39
Income tax benefit (expense) related to items of other comprehensive income	3	(2)	(2)	3	2
Other comprehensive income, net of tax	42	61	61	(123)	41
Total comprehensive loss	\$ (445)	\$ (361)	\$ (72)	\$ 432	\$ (446)

Condensed Consolidating Statement of Comprehensive Income (Loss)
For the six months ended December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Net income (loss)	\$ 24	\$ 43	\$ 212	\$ (255)	\$ 24
Other comprehensive income, before tax:					
Actuarial pension gain	1	1	1	(2)	1
Foreign currency translation adjustment	(6)	(2)	(2)	4	(6)
Net unrealized gain, on derivative contracts and available-for-sale securities	6	22	20	(42)	6
Total other comprehensive income, before tax	1	21	19	(40)	1
Income tax benefit (expense) related to items of other comprehensive income	4	(2)	(1)	2	3
Other comprehensive income, net of tax	5	19	18	(38)	4
Total comprehensive income	\$ 29	\$ 62	\$ 230	\$ (293)	\$ 28

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Comprehensive Income (Loss)
For the three months ended December 29, 2017

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Net income (loss)	\$ (823)	\$ (762)	\$ 595	\$ 167	\$ (823)
Other comprehensive income, before tax:					
Foreign currency translation adjustment	6	5	5	(10)	6
Net unrealized gain on derivative contracts and available-for-sale securities	10	3	3	(6)	10
Total other comprehensive income, before tax	16	8	8	(16)	16
Income tax benefit (expense) related to items of other comprehensive income	(3)	—	1	(1)	(3)
Other comprehensive income, net of tax	13	8	9	(17)	13
Total comprehensive income (loss)	\$ (810)	\$ (754)	\$ 604	\$ 150	\$ (810)

Condensed Consolidating Statement of Comprehensive Income (Loss)
For the six months ended December 29, 2017

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Net income (loss)	\$ (142)	\$ 43	\$ 1,170	\$ (1,213)	\$ (142)
Other comprehensive income, before tax:					
Actuarial pension gain	—	—	—	—	—
Foreign currency translation adjustment	2	1	1	(2)	2
Net unrealized gain on derivative contracts and available-for-sale securities	13	5	5	(10)	13
Total other comprehensive income, before tax	15	6	6	(12)	15
Income tax benefit (expense) related to items of other comprehensive income	(3)	—	(1)	1	(3)
Other comprehensive income, net of tax	12	6	5	(11)	12
Total comprehensive income (loss)	\$ (130)	\$ 49	\$ 1,175	\$ (1,224)	\$ (130)

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Cash Flows
For the six months ended December 28, 2018

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Cash flows from operating activities					
Net cash provided by (used in) operating activities	\$ 103	\$ (819)	\$ 1,934	\$ (44)	\$ 1,174
Cash flows from investing activities					
Purchases of property, plant and equipment	—	(129)	(371)	—	(500)
Proceeds from the sale of property, plant and equipment	—	—	3	—	3
Purchases of investments	—	(11)	(22)	—	(33)
Proceeds from sale of investments	—	—	13	—	13
Proceeds from maturities of investments	—	—	7	—	7
Notes receivable issuances to Flash Ventures	—	—	(508)	—	(508)
Notes receivable proceeds from Flash Ventures	—	—	312	—	312
Strategic investments and other, net	—	(1)	(18)	—	(19)
Intercompany loan from (to) consolidated affiliates	943	(370)	—	(573)	—
Advances from (to) parent and consolidated affiliates	(215)	215	—	—	—
Net cash provided by (used in) investing activities	728	(296)	(584)	(573)	(725)
Cash flows from financing activities					
Issuance of stock under employee stock plans	61	—	—	—	61
Taxes paid on vested stock awards under employee stock plans	(69)	—	—	—	(69)
Repurchases of common stock	(563)	—	—	—	(563)
Repayment of revolving credit facility	(500)	—	—	—	(500)
Dividends paid to shareholders	(292)	—	—	—	(292)
Repayment of debt	(75)	—	—	—	(75)
Intercompany loan from (to) consolidated affiliates	370	(387)	(556)	573	—
Change in investment in consolidated subsidiaries	214	1,997	(2,255)	44	—
Net cash provided by (used in) financing activities	(854)	1,610	(2,811)	617	(1,438)
Effect of exchange rate changes on cash	—	—	(3)	—	(3)
Net increase (decrease) in cash and cash equivalents	(23)	495	(1,464)	—	(992)
Cash and cash equivalents, beginning of year	40	668	4,297	—	5,005
Cash and cash equivalents, end of period	\$ 17	\$ 1,163	\$ 2,833	\$ —	\$ 4,013

WESTERN DIGITAL CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Condensed Consolidating Statement of Cash Flows
For the six months ended December 29, 2017

	Parent	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Eliminations	Total Company
	<i>(in millions)</i>				
Cash flows from operating activities					
Net cash provided by (used in) operating activities	\$ (279)	\$ 108	\$ 2,560	\$ (74)	\$ 2,315
Cash flows from investing activities					
Purchases of property, plant and equipment	—	(113)	(303)	—	(416)
Proceeds from the sale of property, plant and equipment	—	—	10	—	10
Acquisitions, net of cash acquired	—	(93)	(6)	—	(99)
Purchases of investments	—	(11)	(46)	—	(57)
Proceeds from sale of investments	—	—	29	—	29
Proceeds from maturities of investments	—	—	16	—	16
Notes receivable issuances to Flash Ventures	—	—	(621)	—	(621)
Notes receivable proceeds from Flash Ventures	—	—	112	—	112
Strategic investments and other, net	—	(1)	20	—	19
Intercompany loan from consolidated affiliates	1,395	—	—	(1,395)	—
Advances from (to) parent and consolidated affiliates	65	(65)	—	—	—
Net cash provided by (used in) investing activities	1,460	(283)	(789)	(1,395)	(1,007)
Cash flows from financing activities					
Issuance of stock under employee stock plans	99	—	—	—	99
Taxes paid on vested stock awards under employee stock plans	(67)	—	—	—	(67)
Dividends paid to shareholders	(295)	—	—	—	(295)
Settlement of debt hedge contracts	28	—	—	—	28
Repayment of debt	(4,114)	—	—	—	(4,114)
Proceeds from debt	2,963	—	—	—	2,963
Debt issuance costs	(5)	—	—	—	(5)
Intercompany loan to consolidated affiliates	—	(54)	(1,341)	1,395	—
Change in investment in consolidated subsidiaries	214	204	(492)	74	—
Net cash provided by (used in) financing activities	(1,177)	150	(1,833)	1,469	(1,391)
Effect of exchange rate changes on cash	—	—	1	—	1
Net increase (decrease) in cash and cash equivalents	4	(25)	(61)	—	(82)
Cash and cash equivalents, beginning of year	18	1,212	5,124	—	6,354
Cash and cash equivalents, end of period	\$ 22	\$ 1,187	\$ 5,063	\$ —	\$ 6,272

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis contains forward-looking statements within the meaning of the federal securities laws, and should be read in conjunction with the disclosures we make concerning risks and other factors that may affect our business and operating results. You should read this information in conjunction with the unaudited Condensed Consolidated Financial Statements and the notes thereto included in this Quarterly Report on Form 10-Q, and the audited Consolidated Financial Statements and notes thereto and Part II, Item 8, contained in our Annual Report on Form 10-K for the fiscal year ended June 29, 2018. See also “Forward-Looking Statements” immediately prior to Part I, Item 1 in this Quarterly Report on Form 10-Q.

Unless otherwise indicated, references herein to specific years and quarters are to our fiscal years and fiscal quarters. As used herein, the terms “we,” “us,” “our,” and the “Company” refer to Western Digital Corporation and its subsidiaries.

Our Company

We are a leading developer, manufacturer and provider of data storage devices and solutions that address the evolving needs of the information technology industry and the infrastructure that enables the proliferation of data in virtually every other industry. Our broad portfolio of technology and products address the following key markets: Client Devices; Data Center Devices and Solutions; and Client Solutions. We also generate license and royalty revenue related to our intellectual property (“IP”), which is included in each of these three categories.

Key Developments

Flash Ventures

The flash industry is characterized by cyclicalities as it responds to variations in customers’ demand for products and manages production capacity to meet that demand. The favorable demand environment for flash-based products during the last several quarters has begun to normalize as technology conversions are maturing and manufacturing yields are improving, thus increasing flash supply relative to demand. As a result, average selling price per gigabyte of flash-based products has declined.

Through our strategic partnership with Toshiba Memory Corporation (“TMC”) referred to as “Flash Ventures”, we and TMC operate flash-based memory wafer manufacturing facilities in Yokkaichi, Japan. We are obligated to purchase half of Flash Ventures’ flash-based memory wafer supply or pay for half of Flash Ventures’ fixed costs regardless of the output we choose to purchase. We are also obligated to fund 49.9% to 50% of Flash Ventures’ capital investments to the extent that Flash Ventures’ operating cash flow is insufficient to fund these investments.

Flash Ventures has historically operated near 100% of its manufacturing capacity. As a result of the reduced demand for flash-based products, we have temporarily reduced our utilization of our share of Flash Ventures’ manufacturing capacity to an abnormally low level to more closely align our flash-based wafer supply with the projected demand. We do not expect this action to result in any incremental cash payments; however, as a result of this temporary reduction to abnormally low production levels, we incurred costs of \$49 million associated with the reduction in utilization, which was recorded as a charge to cost of revenue in the three months ended December 28, 2018. Including the \$49 million recorded through December 28, 2018, we expect total underutilization charges to be recorded in cost of revenue in the range of \$250 million to \$300 million with the substantial majority expected to be recognized by the end of the fiscal year. We may adjust our plans based on market conditions, which could impact the timing and amount of any charges.

Cost and Expense Reduction Actions

We are taking actions to better align our cost and expense structure to near-term business conditions, including accelerating the closure of our HDD manufacturing facility in Kuala Lumpur, Malaysia, rationalizing other HDD manufacturing costs and other measures to reduce our cost of revenue and operating expenses.

Results of Operations

Second Quarter and First Half Overview

The following table sets forth, for the periods presented, selected summary information from our Condensed Consolidated Statements of Operations by dollars and percentage of net revenue⁽¹⁾:

	Three Months Ended					
	December 28, 2018		December 29, 2017		\$ Change	% Change
	<i>(in millions, except percentages)</i>					
Revenue, net	\$ 4,233	100.0 %	\$ 5,336	100.0 %	\$ (1,103)	(20.7)%
Cost of revenue	3,189	75.3	3,323	62.3	(134)	(4.0)
Gross profit	1,044	24.7	2,013	37.7	(969)	(48.1)
Operating Expenses:						
Research and development	539	12.7	629	11.8	(90)	(14.3)
Selling, general and administrative	309	7.3	381	7.1	(72)	(18.9)
Employee termination, asset impairment, and other charges	20	0.5	48	0.9	(28)	(58.3)
Total operating expenses	868	20.5	1,058	19.8	(190)	(18.0)
Operating income	176	4.2	955	17.9	(779)	(81.6)
Interest and other income (expense):						
Interest income	15	0.4	14	0.3	1	7.1
Interest expense	(118)	(2.8)	(197)	(3.7)	79	(40.1)
Other income, net	8	0.2	2	—	6	300.0
Total interest and other expense, net	(95)	(2.2)	(181)	(3.4)	86	(47.5)
Income before taxes	81	1.9	774	14.5	(693)	(89.5)
Income tax expense	568	13.4	1,597	29.9	(1,029)	(64.4)
Net loss	\$ (487)	(11.5)	\$ (823)	(15.4)	\$ 336	(40.8)

⁽¹⁾ Percentages may not total due to rounding.

	Six Months Ended					
	December 28, 2018		December 29, 2017		\$ Change	% Change
<i>(in millions, except percentages)</i>						
Revenue, net	\$ 9,261	100.0 %	\$ 10,517	100.0 %	\$ (1,256)	(11.9)%
Cost of revenue	6,553	70.8	6,591	62.7	(38)	(0.6)
Gross profit	<u>2,708</u>	<u>29.2</u>	<u>3,926</u>	<u>37.3</u>	<u>(1,218)</u>	<u>(31.0)</u>
Operating Expenses:						
Research and development	1,115	12.0	1,221	11.6	(106)	(8.7)
Selling, general and administrative	665	7.2	745	7.1	(80)	(10.7)
Employee termination, asset impairment, and other charges	66	0.7	100	1.0	(34)	(34.0)
Total operating expenses	<u>1,846</u>	<u>19.9</u>	<u>2,066</u>	<u>19.6</u>	<u>(220)</u>	<u>(10.6)</u>
Operating income	862	9.3	1,860	17.7	(998)	(53.7)
Interest and other income (expense):						
Interest income	30	0.3	30	0.3	—	—
Interest expense	(234)	(2.5)	(402)	(3.8)	168	(41.8)
Other income (expense), net	6	0.1	(4)	—	10	(250.0)
Total interest and other expense, net	<u>(198)</u>	<u>(2.1)</u>	<u>(376)</u>	<u>(3.6)</u>	<u>178</u>	<u>(47.3)</u>
Income before taxes	664	7.2	1,484	14.1	(820)	(55.3)
Income tax expense	640	6.9	1,626	15.5	(986)	(60.6)
Net income (loss)	<u>\$ 24</u>	<u>0.3</u>	<u>\$ (142)</u>	<u>(1.4)</u>	<u>\$ 166</u>	<u>(116.9)</u>

⁽¹⁾ Percentages may not total due to rounding.

The following table sets forth, for the periods presented, summary information regarding our revenue⁽¹⁾:

	Three Months Ended		Six Months Ended	
	December 28, 2018	December 29, 2017	December 28, 2018	December 29, 2017
<i>(in millions, except percentages)</i>				
Revenue by End Market				
Client Devices	\$ 2,214	\$ 2,647	\$ 4,864	\$ 5,323
Data Center Devices & Solutions	1,074	1,434	2,520	2,803
Client Solutions	945	1,255	1,877	2,391
Total Revenue	<u>\$ 4,233</u>	<u>\$ 5,336</u>	<u>\$ 9,261</u>	<u>\$ 10,517</u>
Revenue by Geography (%)				
Americas	24%	25%	25%	26%
Europe, Middle East and Africa	19	19	18	18
Asia	57	56	57	56

⁽¹⁾ Prior year information is presented in accordance with the accounting guidance in effect during that period and has not been updated for Topic 606.

Net Revenue and Gross Margin

Net Revenue. The decrease in net revenue in the three months ended December 28, 2018 from the comparable period of the prior year was primarily driven by lower average selling prices per gigabyte for flash-based products and lower sales of client compute HDD, capacity enterprise HDD and performance enterprise HDD products. Client Devices revenue decreased 16.4% year over year, primarily driven by a reduction in client compute HDD and flash-based mobile products, partially offset by higher revenue in client SSD. Our revenue for Data Center Devices and Solutions decreased 25.1% year over year, primarily driven by lower sales of enterprise SSD, capacity enterprise HDD and performance enterprise HDD products. Client Solutions revenue decreased 24.7% year over year, primarily driven by lower sales of retail HDD and lower average selling prices per gigabyte of flash-based products.

The decrease in net revenue for the six months ended December 28, 2018, compared to the same period in the prior year, is primarily due to lower average selling prices per gigabyte for flash-based products and lower sales of client compute HDD, enterprise SSD and performance enterprise HDD products, partially offset by higher sales of capacity enterprise HDD, flash-based mobile products and client SSD. Client Devices revenue for the six months ended December 28, 2018 decreased 8.6% year over year, primarily driven by lower sales of client compute HDD products, partially offset by stronger sales in the first quarter of flash-based mobile products and client SSD. Our revenue for Data Center Devices and Solutions for the six months ended December 28, 2018 decreased 10.1% year over year, driven primarily by lower sales of our enterprise SSDs and performance enterprise HDDs, partially offset by higher sales of capacity enterprise HDDs. Client Solutions revenue for the six months ended December 28, 2018 decreased 21.5% year over year, primarily driven by lower sales of retail HDD and lower average selling prices per gigabyte of flash-based products.

Our top 10 customers accounted for 47% of our net revenue for the three and six months ended December 28, 2018, respectively, and 42% and 41% of our net revenue for the three and six months ended December 29, 2017, respectively. For the three and six months ended December 28, 2018 and December 29, 2017, no single customer accounted for 10% or more of our net revenue.

Changes in the net revenue by geography generally reflect normal fluctuations in market demand and competitive dynamics.

Consistent with standard industry practice, we have sales incentive and marketing programs that provide customers with price protection and other incentives or reimbursements that are recorded as a reduction to gross revenue. For the three and six months ended December 28, 2018, these programs represented 16% and 14% of gross revenues, respectively. For the three and six months ended December 29, 2017, these programs represented 12% and 13% of gross revenues, respectively. The amounts attributed to our sales incentive and marketing programs generally vary according to several factors including industry conditions, list pricing strategies, seasonal demand, competitor actions, channel mix and overall availability of products. Changes in future customer demand and market conditions may require us to adjust our incentive programs as a percentage of gross revenue.

Gross Profit and Gross Margin. The decreases in gross profit for the three and six months ended December 28, 2018 from the comparable periods in the prior year were primarily due to the lower average selling prices per gigabyte for flash-based products and the flash manufacturing underutilization charge recorded in the three months ended December 28, 2018. Gross profit and gross margin include amortization expense on acquired intangible assets, stock-based compensation, a flash manufacturing underutilization charge, and charges related to the implementation of cost-saving initiatives and other charges, which aggregated \$283 million, or 6.7%, of revenue, compared to \$293 million, or 5.5%, of revenue, for the three months ended December 28, 2018 and December 29, 2017, respectively, and \$530 million, or 5.7%, of revenue, compared to \$572 million, or 5.4%, of revenue, for the six months ended December 28, 2018 and December 29, 2017, respectively. Including the \$49 million recognized through December 28, 2018, we expect gross margins to be negatively impacted by flash manufacturing underutilization charges to be recorded in cost of revenue in the range of \$250 million to \$300 million with the substantial majority expected to be recognized by the end of the fiscal year.

Operating Expenses

The decreases in research and development (“R&D”) expense for both the three and six months ended December 28, 2018 from the same periods in the prior year are primarily due to lower variable compensation expense and lower stock-based compensation expenses.

The decreases in selling, general and administrative (“SG&A”) expense for both the three and six months ended December 28, 2018 from the same periods in the prior year are primarily due to lower variable compensation expense. In addition, we had lower charges related to stock-based compensation expenses, amortization expense on acquired intangible assets, charges related to the implementation of cost-saving initiatives, acquisition-related charges and other charges which aggregated to \$68 million for the three months ended December 28, 2018 compared to \$97 million for the three months ended December 29, 2017 and aggregated to \$141 million for the six months ended December 28, 2018 compared to \$187 million in the six months ended December 29, 2017.

Employee termination, asset impairment and other charges primarily related to actions associated with the realignment of our business. For additional information regarding employee termination, asset impairment and other charges, see Part I, Item 1, Note 13, *Employee Termination, Asset Impairment and Other Charges*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Interest and Other Income (Expense)

The decreases in total interest and other expense, net for both the three and six months ended December 28, 2018 are primarily due to lower interest expense resulting from reductions in the principal amount of debt and lower interest rates as a result of changes to our debt facilities in the third and fourth quarters of fiscal 2018, partially offset by increases in the LIBOR interest rate.

Income Tax Expense

The following table sets forth income tax information from our Condensed Consolidated Statements of Operations by dollar and effective tax rate:

	December 28, 2018	December 29, 2017
	<i>(in millions, except percentages)</i>	
Income before taxes	\$ 81	\$ 774
Income tax expense	568	1,597
Effective tax rate	701%	206%

The Tax Cuts and Jobs Act (the “2017 Act”), enacted on December 22, 2017, includes a broad range of tax reform proposals affecting businesses, including a reduction in the U.S. federal corporate tax rate from 35% to 21%, a one-time mandatory deemed repatriation tax on earnings of certain foreign subsidiaries that were previously tax deferred and the creation of new taxes on certain foreign earnings.

When initially accounting for the tax effects of the enactment of the 2017 Act, we applied the applicable Securities and Exchange Commission (“SEC”) guidance and made a reasonable estimate of the effects on our existing deferred tax balances and the one-time mandatory deemed repatriation tax required by the 2017 Act. As we finalized the accounting for the tax effects of the enactment of the 2017 Act during the one-year measurement period permitted by applicable SEC guidance, we reflected adjustments to the recorded provisional amounts. As of December 28, 2018, we completed our accounting for the tax effects of the enactment of the 2017 Act. Although the U.S. Treasury and the Internal Revenue Service (“IRS”) have issued tax guidance on certain provisions of the 2017 Act since the enactment date, we anticipate the issuance of future additional regulatory and interpretive guidance, even though the one-year measurement period has ended. Although we were able to apply a reasonable interpretation of the law along with any available guidance in finalizing our accounting for the tax effects of the 2017 Act, such future additional regulatory or interpretive guidance would constitute new information which may require further refinements to our estimates in future periods.

The primary driver of the difference between the effective tax rate for the three and six months ended December 28, 2018 and the U.S. Federal statutory rate of 21% is the discrete effect of the finalization of the accounting for the tax effects of the enactment of the 2017 Act. For the three months ended December 28, 2018, these discrete effects consist of \$230 million related to the mandatory deemed repatriation tax and \$134 million related to the decision to change our indefinite reinvestment assertion. For the six months ended December 28, 2018, these discrete effects consist of \$178 million related to the mandatory deemed repatriation tax and \$144 million related to the decision to change our indefinite reinvestment assertion. For both periods, the remaining difference is attributable primarily to the changes in the relative mix of our U.S. earnings compared to foreign earnings.

The primary drivers for the difference between the effective tax rate for the three and six months ended December 29, 2017 and the U.S. Federal statutory rate of 28% are related to the net charge of \$1.66 billion for the one-time mandatory deemed repatriation tax, offset in part by an income tax benefit related to the re-measurement of deferred taxes as required by the 2017 Act. Excluding these items, the effective tax rate for the three and six months ended December 29, 2017 would be approximately 4%. The primary drivers for the remaining difference between the effective tax rate for the three and six months ended December 29, 2017 and the U.S. Federal statutory rate of 28% are the current year generation of tax credits, and tax holidays in Malaysia, Philippines, Singapore and Thailand that expire at various dates during fiscal years 2018 through 2030 and windfall tax benefits related to vesting and exercises of stock-based awards. The windfall tax benefits are a result of the adoption of ASU 2016-09, which requires us to now recognize \$5 million and \$27 million of windfall tax benefits related to vesting and exercises of stock-based awards as a component of our income tax expense for the three and six months ended December 29, 2017, respectively.

Our future effective tax rate is subject to future regulatory developments and changes in the mix of our U.S. earnings compared to foreign earnings. Our total tax expense in future fiscal years may also vary as a result of discrete items such as excess tax benefits or deficiencies.

For additional information regarding income tax expense (benefit), see Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Liquidity and Capital Resources

The following table summarizes our statements of cash flows:

	Six months ended	
	December 28, 2018	December 29, 2017
	(in millions)	
Net cash provided by (used in):		
Operating activities	\$ 1,174	\$ 2,315
Investing activities	(725)	(1,007)
Financing activities	(1,438)	(1,391)
Effect of exchange rate changes on cash	(3)	1
Net decrease in cash and cash equivalents	<u>\$ (992)</u>	<u>\$ (82)</u>

We believe our cash, cash equivalents and cash generated from operations as well as our available credit facilities will be sufficient to meet our working capital, debt, stock repurchases, dividend and capital expenditure needs for at least the next twelve months. Our ability to sustain our working capital position is subject to a number of risks that we discuss in Part II, Item 1A, *Risk Factors*, in this Quarterly Report on Form 10-Q. See also “*Debt*” below for information regarding the credit agreement governing our revolving credit facility and term loans (as amended, the “Credit Agreement”).

During fiscal 2019, we expect cash used for purchases of property, plant and equipment and net activity in notes receivable and equity investments relating to our Flash Ventures joint venture with Toshiba Memory Corporation to be approximately \$1.50 billion to \$1.90 billion. The total expected cash to be used could vary depending on the timing and completion of various capital projects and the availability, timing and terms of related financing.

A total of \$2.68 billion and \$4.15 billion of our cash and cash equivalents was held outside of the U.S. as of December 28, 2018 and June 29, 2018, respectively. As of December 28, 2018, we finalized the accounting for the tax effects of the mandatory deemed repatriation tax on our indefinite reinvestment assertion. After re-evaluating the existing short- and long-term capital allocation policies, we intend to repatriate all of our foreign undistributed earnings. Accordingly, during the six months ended December 28, 2018, we included a foreign income tax expense of \$242 million related to foreign withholding taxes partially offset by foreign tax credits of \$82 million. In addition, a state income tax expense of \$54 million was recorded, partially offset by a decrease to our valuation allowance of \$45 million. Amounts related to federal taxes other than the repatriation tax were not material. Our decision to change our indefinite reinvestment assertion is based on interpretative guidance issued by the IRS to date related to the ordering and the taxation of a repatriation of our foreign undistributed earnings. For additional information regarding our indefinite reinvestment assertion, see Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Operating Activities

Cash flow from operating activities primarily consists of net income, adjusted for non-cash charges, plus or minus changes in other operating assets and liabilities. This represents our principal source of cash. Net cash used for changes in other operating assets and liabilities was \$298 million for the six months ended December 28, 2018, as compared to net cash provided of \$1.27 billion for the six months ended December 29, 2017. The net cash provided by changes in other operating assets and liabilities in the six months ended December 29, 2017 primarily reflects the payable recorded for the mandatory deemed repatriation tax as described in Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q. Changes in our other operating assets and liabilities are also largely affected by our working capital requirements, which are dependent on the effective management of our cash conversion cycle. Our cash conversion cycle measures how quickly we can convert our products into cash through sales. The cash conversion cycles were as follows:

	Quarter to Date	
	December 28, 2018	December 29, 2017
	<i>(in days)</i>	
Days sales outstanding	37	35
Days in inventory	98	62
Days payables outstanding	(64)	(59)
Cash conversion cycle	71	38

Changes in days sales outstanding (“DSOs”) are generally due to the linearity of shipments. Changes in days in inventory (“DIOs”) are generally related to the timing of inventory builds. Changes in days payables outstanding (“DPOs”) are generally related to production volume and the timing of purchases during the period. From time to time, we modify the timing of payments to our vendors. We make modifications primarily to manage our vendor relationships and to manage our cash flows, including our cash balances. Generally, we make the payment term modifications through negotiations with our vendors or by granting to, or receiving from, our vendors’ payment term accommodations.

For the three months ended December 28, 2018, DSO increased by 2 days over the prior year, primarily reflecting the timing of shipments and customer collections. DIO increased by 36 days over the prior year, primarily reflecting increases in hard drive inventory in preparation for the planned plant closures in Kuala Lumpur, Malaysia and increases in flash inventory. DPO increased by 5 days over the prior year, primarily reflecting routine variations in timing of purchases and payments during the period.

Investing Activities

During the six months ended December 28, 2018, net cash used in investing activities primarily consisted of \$500 million of capital expenditures and a net \$196 million increase in notes receivable issuances to Flash Ventures to fund its capital expansion. Net cash used in investing activities for the six months ended December 29, 2017 primarily consisted of \$416 million of capital expenditures, a \$509 million net increase in notes receivable issuances to and investments in Flash Ventures and \$99 million for acquisitions.

Our cash equivalents are primarily invested in money market funds that invest in U.S. Treasury securities and U.S. Government agency securities as well as bank certificates of deposit. In addition, we invest directly in U.S. Treasury securities, U.S. and International Government agency securities, certificates of deposit, asset-backed securities and corporate and municipal notes and bonds.

Financing Activities

During the six months ended December 28, 2018, net cash used in financing activities primarily consisted of \$575 million for the repayment of our revolving credit facility and debt, \$563 million of share repurchases and \$292 million to pay dividends on our common stock. Net cash used in financing activities for the six months ended December 29, 2017 primarily consisted of a net \$1.15 billion reduction in debt and \$295 million to pay dividends on our common stock.

Off-Balance Sheet Arrangements

Other than the commitments related to Flash Ventures, facility lease commitments incurred in the normal course of business and certain indemnification provisions (see “Short and Long-term Liquidity-Contractual Obligations and Commitments” below), we do not have any other material off-balance sheet financing arrangements or liabilities, guarantee contracts, retained or contingent interests in transferred assets, or any other obligation arising out of a material variable interest in an unconsolidated entity. We do not have any majority-owned subsidiaries that are not included in the Condensed Consolidated Financial Statements. Additionally, we do not have an interest in, or relationships with, any special-purpose entities. For additional information regarding our off-balance sheet arrangements, see Part I, Item 1, Note 9, *Commitments, Contingencies and Related Parties*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Short and Long-term Liquidity

Contractual Obligations and Commitments

The following is a summary of our known contractual cash obligations and commercial commitments as of December 28, 2018:

	Total	1 Year (Remaining 6 months of 2019)	2-3 Years (2020- 2021)	4-5 Years (2022- 2023)	More than 5 Years (Beyond 2023)
	<i>(in millions)</i>				
Long-term debt, including current portion ⁽¹⁾	\$ 10,800	\$ 107	\$ 517	\$ 6,776	\$ 3,400
Interest on debt	2,137	215	847	731	344
Flash Ventures and other related commitments ⁽²⁾	6,769	1,968	2,772	1,582	447
Operating leases	170	28	84	39	19
Purchase obligations	2,816	1,777	561	478	—
Mandatory Deemed Repatriation Tax	1,208	—	186	215	807
Total	\$ 23,900	\$ 4,095	\$ 4,967	\$ 9,821	\$ 5,017

⁽¹⁾ Principal portion of debt, excluding discounts and issuance costs.

⁽²⁾ Includes reimbursement for depreciation and lease payments on owned and committed equipment, funding commitments for loans and equity investments and reimbursement for other committed expenses, including R&D. Funding commitments assume no additional operating lease guarantees. Additional operating lease guarantees can reduce funding commitments.

Debt

We had \$10.80 billion of debt outstanding as of December 28, 2018, including \$7.37 billion of term loans under our Credit Agreement, \$2.30 billion of senior unsecured notes due 2024 and \$1.10 billion of convertible notes due 2024.

Under the Credit Agreement, we are required to comply with certain financial covenants with respect to the revolving credit facility and Term Loan A-1, which consist of a leverage ratio and an interest coverage ratio. As of December 28, 2018, we were in compliance with all financial covenants under the Credit Agreement.

The financial covenants are based upon a trailing twelve-month Adjusted EBITDA as defined in the Credit Agreement. Our Adjusted EBITDA declined significantly during the three months ended December 28, 2018, and such decline may continue. Sustained deterioration in our operating results could cause our trailing twelve-month Adjusted EBITDA to drop below the threshold required for compliance with our leverage ratio, which could result in an event of default under the Credit Agreement. If an event of default under the Credit Agreement were to occur and if we were not able to obtain a waiver from the required lenders (or if we were not able to obtain such waiver on terms acceptable to us), there could be significant negative consequences for the Company. See Part II, Item 1A, “*Risk Factors—Our high level of debt may have an adverse impact on our liquidity, restrict our current and future operations, particularly our ability to respond to business opportunities, and increase our vulnerability to adverse economic and industry conditions*” for a discussion of risks related to our level of debt, including the consequences of an event of default thereunder.

Additional information regarding our indebtedness, including information about new borrowings and repayments, increased availability under our revolving credit facility and the principal repayment terms, interest rates, covenants and other key terms of our outstanding indebtedness, is included in Part I, Item 1, Note 7, *Debt*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q and Part II, Item 8, Note 6, *Debt*, of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended June 29, 2018.

Flash Ventures

Flash Ventures sells to and leases back from a consortium of financial institutions a portion of its tools and has entered into equipment lease agreements of which we guarantee half or all of the outstanding obligations under each lease agreement. The lease agreements contain customary covenants for Japanese lease facilities. In addition to containing customary events of default related to Flash Ventures that could result in an acceleration of Flash Ventures' obligations, the lease agreements contain acceleration clauses for certain events of default related to the guarantors, including us. As of December 28, 2018, we were in compliance with all covenants under these Japanese lease facilities. See Part I, Item 1, Note 9, *Commitments, Contingencies and Related Parties*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q for information regarding Flash Ventures.

Purchase Obligations

In the normal course of business, we enter into purchase orders with suppliers for the purchase of components used to manufacture our products. These purchase orders generally cover forecasted component supplies needed for production during the next quarter, are recorded as a liability upon receipt of the components, and generally may be changed or canceled at any time prior to shipment of the components. In addition, we have entered into long-term purchase agreements with various component suppliers, containing minimum quantity requirements. However, the dollar amount of the purchases may depend on the specific products ordered, achievement of pre-defined quantity or quality specifications or future price negotiations. The estimated related minimum purchase requirements are included in "Purchase obligations" in the table above. We have also entered into long-term purchase agreements with various component suppliers that carry fixed volumes and pricing which obligate us to make certain future purchases, contingent on certain conditions of performance, quality and technology of the vendor's components. These arrangements are included under "Purchase obligations" in the table above.

Mandatory Deemed Repatriation Tax

The following is a summary of our estimated mandatory deemed repatriation tax obligations that are payable in the following fiscal years (in millions):

Remaining six months of 2019	\$	—
2020		78
2021		108
2022		108
2023		108
2024		202
2025		268
2026		336
Total	\$	1,208

The 2017 Act allows for the mandatory deemed repatriation tax of \$1.36 billion to be payable over an 8-year period without interest. The payments are due with 8% of the tax to be paid in each of the first five years, 15% in the 6th year, 20% in the 7th year, and 25% in the 8th year. As of December 28, 2018, total payments of \$150 million have been made towards the mandatory deemed repatriation tax of \$1.36 billion for a remaining net tax liability owed of \$1.21 billion. For additional information regarding our estimate of the total tax liability for the mandatory deemed repatriation tax, see Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Unrecognized Tax Benefits

As of December 28, 2018, the liability for unrecognized tax benefits (excluding accrued interest and penalties) was approximately \$690 million. Accrued interest and penalties related to unrecognized tax benefits as of December 28, 2018 was approximately \$116 million. Of these amounts, approximately \$688 million could result in potential cash payments. We are not able to provide a reasonable estimate of the timing of future tax payments related to these obligations. For additional information regarding our total tax liability for unrecognized tax benefits, see Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Interest Rate Swap

We have entered into interest rate swap agreements to moderate our exposure to fluctuations in interest rates underlying our variable rate debt. For a description of our current interest rate swaps, see Part I, Item 3, *Quantitative and Qualitative Disclosures About Market Risk* included in this Quarterly Report on Form 10-Q.

Foreign Exchange Contracts

We purchase foreign exchange contracts to hedge the impact of foreign currency fluctuations on certain underlying assets, liabilities and commitments for operating expenses and product costs denominated in foreign currencies. For a description of our current foreign exchange contract commitments, see Part I, Item 3, *Quantitative and Qualitative Disclosures About Market Risk* and Part I, Item 1, Note 6, *Derivative Instruments and Hedging Activities*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Indemnifications

In the ordinary course of business, we may provide indemnifications of varying scope and terms to customers, vendors, lessors, business partners and other parties with respect to certain matters, including, but not limited to, losses arising out of our breach of agreements, products or services to be provided by us, environmental compliance or from IP infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and certain of our officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. We maintain director and officer insurance, which may cover certain liabilities arising from our obligation to indemnify our directors and officers in certain circumstances.

It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Such indemnification agreements may not be subject to maximum loss clauses. Historically, we have not incurred material costs as a result of obligations under these agreements.

Stock Repurchase Program

Our Board of Directors previously authorized \$5.00 billion for the repurchase of our common stock. On July 25, 2018, our Board of Directors authorized a new \$5.00 billion share repurchase program that is effective through July 25, 2023, replacing all prior programs. For the three months ended December 28, 2018, we did not make any stock repurchases. For the six months ended December 28, 2018, we repurchased 0.8 million shares for a total cost of \$61 million under the previous authorization and 7.6 million shares for a total cost of \$502 million under the new authorization. Therefore, our stock repurchases under all stock repurchase authorizations in effect for the six months ended December 28, 2018 totaled \$563 million. The remaining amount available to be repurchased under our current stock repurchase program as of December 28, 2018 was \$4.50 billion. Repurchases under the stock repurchase program may be made in the open market or in privately negotiated transactions and may be made under a Rule 10b5-1 plan. We expect stock repurchases to be funded principally by operating cash flows.

Cash Dividend

Since the first quarter of 2013, we have issued a quarterly cash dividend. On July 16, 2018, we paid \$148 million for a dividend declared in the fourth quarter of fiscal 2018. During the six months ended December 28, 2018, we declared aggregate cash dividends of \$1.00 per share on our outstanding common stock totaling \$290 million, of which \$146 million was paid on January 14, 2019. We may modify, suspend, or cancel our cash dividend policy in any manner and at any time.

Recent Accounting Pronouncements

For a description of recently issued and adopted accounting pronouncements, including the respective dates of adoption and expected effects on our results of operations and financial condition, see Part I, Item 1, Note 2, *Recent Accounting Pronouncements*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

Critical Accounting Policies and Estimates

We have prepared the accompanying Condensed Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”). The preparation of the financial statements requires the use of judgments and estimates that affect the reported amounts of revenues, expenses, assets, liabilities and shareholders’ equity. We have adopted accounting policies and practices that are generally accepted in the industry in which we operate. If these estimates differ significantly from actual results, the impact to the Condensed Consolidated Financial Statements may be material.

See Part I, Item 1, Note 2, *Recent Accounting Pronouncements*, and Note 3, *Revenues*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q for a discussion of a recently adopted accounting pronouncement that affects our recognition of revenue. There have been no other material changes in our critical accounting policies and estimates from those disclosed in our Annual Report on Form 10-K for the fiscal year ended June 29, 2018. Please refer to Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended June 29, 2018 for a discussion of our critical accounting policies and estimates.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Disclosure About Foreign Currency Risk

Although the majority of our transactions are in U.S. dollars, some transactions are based in various foreign currencies. We purchase short-term, foreign exchange contracts to hedge the impact of foreign currency exchange fluctuations on certain underlying assets, liabilities and commitments for product costs and operating expenses denominated in foreign currencies. The purpose of entering into these hedge transactions is to minimize the impact of foreign currency fluctuations on our results of operations. Substantially all of the contract maturity dates do not exceed 12 months. We do not purchase foreign exchange contracts for speculative or trading purposes. For additional information, see Part I, Item 1, Note 5, *Fair Value Measurements and Investments* and Note 6, *Derivative Instruments and Hedging Activities*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

As of December 28, 2018, we had outstanding the foreign exchange contracts presented in the following table. The designated foreign exchange contracts are entered to protect the U.S. dollar value of our product cost and operating expenses. Changes in fair values of the non-designated foreign exchange contracts are recognized in other income (expense), net and are largely offset by corresponding changes in the fair values of the foreign currency denominated monetary assets and liabilities.

	Contract Amount	Weighted-Average Contract Rate ⁽¹⁾	Mark to Market Unrealized Gain (Loss)
<i>(in millions, except weighted-average contract rate)</i>			
Designated Hedges (cash flow hedges):			
Japanese yen	\$ 955	111.46	\$ 19
Malaysian ringgit	95	4.17	—
Philippine peso	33	53.37	—
Thai baht	112	32.67	1
Total designated forward contracts	<u>\$ 1,195</u>		<u>\$ 20</u>
Non-Designated Hedges:			
British pound sterling	\$ 6	0.78	\$ —
Euro	187	0.87	—
Japanese yen	2,320	110.37	(17)
Malaysian ringgit	312	4.16	—
Philippine peso	66	52.54	—
Thai baht	212	32.62	—
Total non-designated forward contracts	<u>\$ 3,103</u>		<u>\$ (17)</u>

⁽¹⁾ Expressed in units of foreign currency per U.S. dollar.

During the six months ended December 28, 2018 and December 29, 2017, total net realized and unrealized transaction and foreign exchange contract currency gains and losses were not material to our Condensed Consolidated Financial Statements.

Notwithstanding our efforts to mitigate some foreign exchange risks, we do not hedge all of our foreign currency exposures, and there can be no assurance that our mitigating activities related to the exposures that we hedge will adequately protect us against risks associated with foreign currency fluctuations.

Disclosure About Other Market Risks

Variable Interest Rate Risk

Borrowings under our revolving credit facility and our term loan A-1 due 2023 bear interest at a rate per annum, at our option, of either an adjusted London Interbank Offered Rate (“LIBOR”) (subject to a 0.0% floor) plus an applicable margin varying from 1.125% to 2.000% or a base rate plus an applicable margin varying from 0.125% to 1.000%, in each case depending on our corporate credit ratings. As of December 28, 2018, the applicable margin based on our current credit ratings was 1.5%. Borrowings under our U.S. Term Loan B-4 due 2023 bear interest at a rate per annum, at our option, of either an adjusted LIBOR (subject to a 0.0% floor) plus a margin of 1.75% or a base rate plus a margin of 0.75%.

We have generally held a balance of fixed and variable rate debt. At December 28, 2018, 68% of the par value of our debt was at variable rates. We previously entered into pay-fixed interest rate swaps, which effectively converts \$1.00 billion of our term loans to fixed rates through May 2020 and an incremental \$1.00 billion through April 2023. In January 2019, we entered into an additional pay-fixed interest rate swap agreement to convert \$1.00 billion of our term loans to fixed rates from May 2020 through April 2023. This new interest rate swap agreement, along with our previously existing interest rate swap agreements, effectively converts \$2.00 billion of our term loans to fixed rates through 2023. As of December 28, 2018, we had \$7.37 billion of variable rate debt. After giving effect to the \$2.00 billion of interest rate swaps, we effectively had \$5.37 billion of long-term debt subject to variations in interest rates and a one percent increase in the variable rate of interest would increase annual interest expense by \$54 million.

For additional information regarding our indebtedness, see Part I, Item 1, Note 7, *Debt*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q and Part II, Item 8, Note 6, *Debt*, of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended June 29, 2018.

Item 4. Controls and Procedures

As required by Rule 13a-15(b) promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective.

There were no changes in our internal control over financial reporting that occurred during our most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

We are implementing an enterprise resource planning (“ERP”) system on a worldwide basis, which is expected to improve the efficiency of certain financial and related transactional processes. The gradual implementation is expected to occur in phases over the next several years. We have completed the implementation of certain processes, including the financial consolidation and reporting, fixed assets, supplier management and indirect procure-to-pay processes, and have revised and updated the related controls. These changes did not materially affect our internal control over financial reporting. As we implement the remaining functionality under this ERP system over the next several years, we will continue to assess the impact on our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings*

For a description of our legal proceedings, see Part I, Item 1, Note 14, *Legal Proceedings*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q, which is incorporated by reference in response to this item.

Item 1A. *Risk Factors*

Our business, financial condition and operating results can be affected by a number of risks and uncertainties, whether currently known or unknown, any one or more of which could, directly or indirectly, cause our actual results of operations and financial condition to vary materially from past, or from anticipated future, results of operations and financial condition. The risks and uncertainties discussed below are not the only ones facing our business, but do represent those risks and uncertainties that we believe are material to us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business, financial condition, results of operations or the market price of our common stock.

Adverse global economic conditions and credit market uncertainty could harm our business, results of operations and financial condition.

Adverse global economic conditions and uncertain conditions in the credit market have had, and in the future could have, a significant adverse effect on our company and on the storage industry as a whole. Several factors contribute to these conditions and this uncertainty, including, but not limited to, volatility in the equity, credit and other financial markets and real estate markets, slower growth in certain geographic regions, lower levels of consumer liquidity, risk of default on sovereign debt, higher interest rates, materials and component cost increases, political uncertainty and other macroeconomic factors, such as trade and tariff actions announced by the U.S., China and other countries and the referendum by British voters to exit the European Union, commonly referred to as “Brexit,” and changes to policies, rules and regulations, such as potential U.S. export control reform, including with respect to emerging and foundational technology. Some of the risks and uncertainties we face as a result of these conditions include, but are not limited to, the following:

- Our direct and indirect customers may delay or reduce their purchases of our products and systems containing our products.
- If demand for our products slows as a result of a deterioration in economic conditions, we may undertake restructuring activities to realign our cost structure with softening demand.
- We extend credit and payment terms to some of our customers and we could suffer significant losses if a customer whose accounts receivable we have not insured, or have underinsured, fails to pay us on their accounts receivable balances.
- If negative or uncertain global economic conditions result in circumstances, such as a sustained decline in our stock price and market capitalization or a decrease in our forecasted cash flows, indicating that the carrying value of our long-lived assets or goodwill may be impaired, we could be required to record a significant charge to earnings in our Consolidated Financial Statements.

These actions and conditions could result in reductions in our revenue, increased operating costs, impairment charges and other expenses, which could adversely affect our business, results of operations and financial condition.

We rely substantially on our business ventures with Toshiba Memory Corporation (“TMC”) for the supply of flash-based memory and the development of flash-based technology, which subjects us to risks and uncertainties that could harm our business, financial condition and operating results.

We are dependent on our ventures with TMC to develop and manufacture flash-based memory products for our flash-based memory supply, and therefore our business, financial condition and operating results are dependent on the continued success of Flash Ventures. We partner with TMC on the development of flash-based technology, including the next technology transitions of flash-based memory, as well as other non-volatile memory technology in support of Flash Ventures. Flash Ventures is subject to various risks that could harm the value of our investments, our revenue and costs, our future rate of spending, our technology plans and our future growth opportunities.

Substantially all of our flash-based memory is supplied by Flash Ventures, which limits our ability to respond to market demand and supply changes. A failure to accurately forecast demand could cause us to over-invest or under-invest in technology transitions or the expansion of captive memory capacity in Flash Ventures. Over-investment could result in excess supply, which could cause significant decreases in our product prices, significant excess, obsolete inventory or inventory write-downs or under-utilization charges, and the potential impairment of our investments in Flash Ventures. On the other hand, if we or TMC under-invest in captive memory capacity or technology transitions, if we grow capacity more slowly than the rest of the industry, if our technology transitions do not occur on the timeline that we expect, if we encounter unanticipated difficulties in implementing these transitions, or if we implement technology transitions more slowly than our competitors, we may not have enough captive supply of the right type of memory or at all to meet demand on a timely and cost effective basis and we may lose opportunities for revenue, gross margin and market share as a result. If our flash-based memory supply is limited, we may make strategic decisions with respect to the allocation of our supply among our products and customers, and these strategic allocation decisions may result in less favorable gross margin or damage certain customer relationships. We are also contractually obligated to pay for 50% of the fixed costs of Flash Ventures regardless of whether we purchase any wafers from Flash Ventures. Furthermore, purchase orders placed with Flash Ventures and under the foundry arrangements with TMC for up to three months are binding and cannot be canceled. Therefore, once our purchase decisions have been made, our production costs for flash memory are fixed, and we may be unable to reduce costs to match any subsequent declines in pricing or demand, which would harm our gross margin. Our limited ability to react to fluctuations in flash memory supply and demand makes our financial results particularly susceptible to variations from our forecasts and expectations.

Under the terms of our venture agreements with TMC, which govern the operations of Flash Ventures, we have limited power to unilaterally direct most of the activities that most significantly impact Flash Ventures’ performance and we have limits to our ability to source or fabricate flash-based products outside of the Flash Ventures. We may not always agree with TMC on our joint R&D roadmap or expansions or conversions of production capacity. In addition, TMC’s shift in strategic priorities could adversely impact our business.

In June 2018, Toshiba Corporation announced it had completed the sale of TMC, including its interests in Flash Ventures, to a consortium led by SK hynix Inc. and Bain Capital (the “Bain Consortium”) that includes other competitors, as well as key customers. The sale of TMC to the Bain Consortium could lead to delays in decision-making, disputes, or changes in strategic direction that could adversely impact Flash Ventures and/or adversely affect our business prospects, results of operations and financial condition. The Bain Consortium might not have the same interest that we do in protecting and growing Flash Ventures’ business and there may exist conflicts of interest between the Bain Consortium and Flash Ventures or us. Misalignment between us and TMC or the Bain Consortium on the strategic direction of Flash Ventures could adversely impact Flash Ventures’ ability to stay at the forefront of technological advancement and/or our investment in Flash Ventures. Flash Ventures’ competitiveness and/or our investment in Flash Ventures could also be harmed by a mishandling or misuse of IP or other competitively sensitive confidential information regarding Flash Ventures, such as its technology roadmap, business or investment plans, by a third party that might gain access to such information.

Flash Ventures requires significant investments by both TMC and us for technology transitions, including the transition to 3D NAND, and capacity expansions. The Bain Consortium has entered into financing agreements in connection with its purchase of TMC that could limit TMC’s ability to timely fund or finance investments in Flash Ventures or our joint development efforts, as well as limit Flash Ventures’ ability to enter into lease financings. To the extent that lease financings for Flash Ventures are not accessible on favorable terms or at all, more cash would be required to fund investments. If TMC does not or we do not provide sufficient resources, or have adequate access to credit, to timely fund investments in Flash Ventures, our investments could be delayed or reduced. Delayed or reduced investment in manufacturing capacity or research and development by TMC or us could harm Flash Ventures’ competitiveness and/or our investment in Flash Ventures. In addition, the financing arrangements that the Bain Consortium has entered into in connection with its purchase of TMC are secured by TMC’s equity interests in Flash Ventures, permitting the lenders to foreclose on those equity interests under certain circumstances.

In July 2018, TMC announced that it was starting construction of a new wafer fabrication facility for the manufacture of 3D NAND in Kitakami, Iwate, Japan. Although we intend to enter into agreements with TMC in due course to participate in the new Kitakami facility, there is no certainty as to when, and on what terms, we will do so. If we are unable to extend our partnership with TMC to the Kitakami facility on favorable terms, our future supply of captive flash-based memory could be adversely impacted, which could adversely affect our long-term business and financial results.

We participate in a highly competitive industry that is subject to volatile demand, declining average selling prices (“ASPs”), rapid technological change and industry consolidation, all of which could adversely affect our operating results and financial condition.

Demand for our devices, software and solutions that we offer to our customers, which we refer to in this Item 1A as our “products”, depends in large part on the demand for systems (including personal computers (“PCs”) and mobile devices) manufactured by our customers and on storage upgrades to existing systems. The demand for systems has been volatile in the past and often has had an exaggerated effect on the demand for our products in any given period. The prices of our products are influenced by, among other factors, the balance between supply and demand, including the effects of new fab capacity in the industry, macroeconomic factors, business conditions, technology transitions, and other actions taken by us or our competitors. The price of NAND flash memory is also influenced by conversion of industry DRAM capacity to NAND and conversion of 2D NAND capacity to 3D NAND. The storage market has experienced periods of excess capacity, which can lead to liquidation of excess inventories and significant reductions in price. If these price changes occur unnecessarily or in an unexpected manner, there will likely be an adverse impact on our revenue and gross margins.

In addition, we compete based on our ability to offer our customers competitive solutions that provide the most current and desired product and service features. We expect that competition will continue to be intense, and there is a risk that our competitors may be able to gain a technological or cost structure advantage over us, which may allow their products to be less costly or enable them to provide better performance or to include additional features when compared to our products. Further, some of our competitors may utilize certain pricing strategies, including offering products at prices at or below cost, that we may be unable to competitively match. In addition, the Chinese government and various agencies, state-owned or affiliated enterprises and investment funds are making significant investments to promote China’s domestic semiconductor industry consistent with the government’s stated national policy objectives. If we are unable to effectively compete with any manufacturers located in China or non-Chinese competitors benefitting from alliances with Chinese companies in the markets where we compete, our operating results and financial condition will suffer.

Additionally, some of our competitors offer products and technologies that we do not offer and may be able to use their broader product and technology portfolio to win sales from us. Our ASPs and gross margins also tend to decline when there is a shift in the mix of product sales, and sales of lower priced products increase relative to those of higher priced products. Further, we face potential gross margin pressures resulting from our ASPs declining more rapidly than our cost of revenue. Rapid technological changes often reduce the volume and profitability of sales of existing products and increase the risk of inventory obsolescence. Finally, the data storage industry as a whole has experienced consolidation over the past several years through acquisitions, mergers and decisions by industry players to exit the industry. Further consolidation across the industry could enhance the capacity, abilities and resources and lower the cost structure of some of our competitors, causing us to be at a competitive disadvantage. These factors, along with others, may also result in significant shifts in market share among the industry’s major participants, including a substantial decrease in our market share, all of which could adversely impact our operating results and financial condition.

Expansion into new markets may increase the complexity of our business and cause us to increase our R&D expenses and investments in manufacturing capability, technology enhancements and go-to-market capability, and if we are unable to successfully adapt our business processes and product offerings as required by these new markets, our ability to grow will be adversely affected.

To remain a significant supplier in the storage industry and to expand into new markets, we will need to offer a broader range of storage products to our customers. As we expand our product lines to sell into new markets, the overall complexity of our business may increase at an accelerated rate and we may become subject to different market dynamics. These dynamics may include, among other things, different demand volume, cyclicity, seasonality, product requirements, sales channels, and warranty and return policies. In addition, expansion into new markets may result in increases in R&D expenses and substantial investments in manufacturing capability, technology enhancements and go-to-market capability. If we fail to successfully expand into new markets with products that we do not currently offer, we may lose business to our competitors or new entrants who offer these products.

If we do not properly manage technology transitions, our competitiveness and operating results may be negatively affected.

The storage markets in which we offer our products continuously undergo technology transitions that we must anticipate and adapt our products to address in a timely manner. If we fail to implement new technologies successfully, or if we are slower than our competitors at implementing new technologies, we may not be able to competitively offer products that our customers desire or keep pace with ASP reduction, which could harm our operating results. For example, in transitioning our 2D NAND manufacturing capacity to 3D NAND technology, we could experience delays or other challenges in the production ramp, qualification of wafers, shipment of samples to customers or customer approval process. 3D NAND and any new manufacturing node may be more susceptible to manufacturing yield issues. Manufacturing yield issues may not be identified during the development or production process or solved until an actual product is manufactured and tested, further increasing our costs. If our technology transitions, including the production ramp of 3D NAND technology, take longer, are more costly to complete than anticipated, or do not improve manufacturing yield or other manufacturing efficiencies, our flash memory costs may not remain competitive with other flash-based memory producers or may not fall commensurate with declines in the price of flash-based memory, which would harm revenues, our gross margin and operating results.

For additional technology transition risks related to 3D NAND, see the risk factors entitled “*We rely substantially on our business ventures with Toshiba Memory Corporation (“TMC”) for the supply of flash-based memory and the development of flash-based technology, which subjects us to risks and uncertainties that could harm our business, financial condition and operating results*” and “*Our strategic relationships subject us to risks that could adversely affect our business, financial condition and results of operations.*”

With respect to HDDs, we announced that we will use microwave-assisted magnetic recording (MAMR) technology to increase HDD capacities. If our HDD technology transitions, including the production ramp of MAMR HDDs, take longer or are more costly to complete than anticipated or if we otherwise fail to implement new HDD technologies successfully, we may not remain competitive with other HDD producers, which could adversely affect our revenues, gross margin and operating results.

Moving to new technologies may require us to align to, and build, a new supply base. Our success in new product areas may be dependent in part on our ability to develop close relationships with new suppliers and on our ability to enter into favorable supply agreements. Where this cannot be done, our business and operations may be adversely affected. In addition, if our customers choose to delay transition to new technologies, if demand for the products that we develop is lower than expected or if the supporting technologies to implement these new technologies are not available, we may be unable to achieve the cost structure required to support our profit objectives or may be unable to grow or maintain our market position.

The substitution or replacement of our technologies and products by new technologies could make our products obsolete and harm our operating results.

Given the pace of technological development, there is a possibility that new technologies could substitute for or replace our current technologies and products and make them obsolete. Historically, when the industry experiences a fundamental change in storage technologies or standards, any manufacturer that fails to successfully and timely adjust its designs and processes to accommodate or manufacture the new technology or standard fails to remain competitive.

There are some revolutionary technologies that, if implemented by a competitor on a commercially viable basis ahead of the industry, could put us at a competitive disadvantage, including shingled magnetic recording, energy-assisted magnetic recording, patterned magnetic media and advanced signal processing.

Many companies, including some of our competitors, have also developed or are attempting to develop alternative non-volatile technologies, including non-NAND technologies such as magnetoresistive random-access memory (MRAM), resistive random-access memory (ReRAM) and phase change memory (PCM), and NAND-based vertical or stacked 3D memories based on charge trap, floating gate and other cell architectures.

In addition, a provider of processors and non-volatile memory solutions may be developing a new standard to attach ultra-low latency non-volatile memory to its processor memory bus, which it may choose not to license to its competitors, resulting in it being a single source provider of such non-volatile memory solutions. As a result of these shifts in technology and standards, we could incur substantial costs in developing new technologies, such as recording heads, magnetic media and tools, in adopting new standards or in investing in different capital equipment or manufacturing processes to remain competitive. If we fail to successfully implement these new technologies or standards, or if we are significantly slower than our competitors at implementing new technologies or standards, we may not be able to offer products with capacities and capabilities that our customers desire, which could harm our operating results.

If we do not properly manage new product development, our competitiveness and operating results may be negatively affected.

Our success depends in part on our ability to develop and introduce new products in a timely manner in order to keep pace with technology advancements and compete with alternative storage technologies. If our products fail to offer a superior value proposition to alternative storage products, we will be at a competitive disadvantage and our business will suffer. As we introduce new products, standards or technologies, it can take time for these new standards or technologies to be adopted, for customers to accept and transition to these new standards or technologies and for significant sales to be generated, if at all. Failure of our customers to adopt our new products, standards or technologies could harm our results of operations as we fail to reap the benefits of our investments.

In addition, the success of our new product introductions depends on a number of other factors, including:

- difficulties faced in manufacturing ramp;
- implementing at an acceptable cost product features expected by our customers;
- our ability to successfully transition future core, processor and controller development to the RISC-V architecture;
- market acceptance/qualification;
- effective management of inventory levels in line with anticipated product demand;
- our ability to respond to customer requests for new products and software associated with our products;
- our ability to incorporate open source software elements into our products and operate in an open source environment;
- quality problems or other defects in the early stages of new product introduction and problems with compatibility between our products and those of our customers that were not anticipated in the design of those products;
- our ability to increase our software development capability; and
- the effectiveness of our go-to-market capability in selling new products.

Our strategic relationships subject us to risks that could adversely affect our business, financial condition and results of operations.

We have entered into strategic relationships with various partners for future product development, sales growth and the supply of technologies, components, equipment and materials for use in our product design and manufacturing, including our partnership with TMC for flash-based memory development and manufacturing. See the risk factor entitled “*Because we are dependent on a limited number of qualified suppliers, a disruption in our supply chain, including a shortage in supply or a supplier’s failure to support us in a timely manner with goods or services at a quality level and cost acceptable to us, or supplier consolidation, could adversely affect our margins, revenues and operating results*” for a further description of the risks associated with our reliance on external suppliers. These strategic relationships are subject to various risks that could adversely affect the value of our investments and our results of operations and financial condition. These risks include, but are not limited to, the following:

- our interests could diverge from our partners’ interests or we may not agree with co-venturers on ongoing activities, technology transitions or on the amount, timing or nature of further investments in the relationship;

- we may experience difficulties and delays in product and technology development at, ramping production at, and transferring technology to, our business ventures;
- our control over the operations of our business ventures is limited;
- due to financial constraints, our co-venturers may be unable to meet their commitments to us or may pose credit risks for our transactions with them;
- due to differing business models, financial constraints or long-term business goals, our partners may decide not to join us in funding capital investment by our business ventures, which may result in higher levels of cash expenditures by us or prevent us from proceeding in the investment;
- we may lose the rights to technology or products being developed by the strategic relationship, including if any of our co-venturers is acquired by another company or otherwise transfers its interest in the business venture, files for bankruptcy or experiences financial or other losses;
- a bankruptcy event involving a co-venturer could result in the early termination or adverse modification of the business venture or agreements governing the business venture;
- we may experience difficulties or delays in collecting amounts due to us from our co-venturers;
- the terms of our arrangements may turn out to be unfavorable; and
- changes in tax, legal or regulatory requirements may necessitate changes in the agreements with our co-venturers.

If our strategic relationships are unsuccessful or there are unanticipated changes in, or termination of, our strategic relationships, our business, results of operations and financial condition may be adversely affected.

Because we are dependent on a limited number of qualified suppliers, a disruption in our supply chain, including a shortage in supply or a supplier's failure to support us in a timely manner with goods or services at a quality level and cost acceptable to us, or supplier consolidation, could adversely affect our margins, revenues and operating results.

We depend on an external supply base for technologies, software (including firmware), preamps, controller, components, equipment and materials for use in our product design and manufacturing. We also depend on suppliers for a portion of our wafer testing, chip assembly, product assembly and product testing, and on service suppliers for providing technical support for our products. In addition, we use logistics partners to manage our just-in-time hubs, distribution centers and freight from suppliers to our factories and from our factories to our customers throughout the world. Many of the components and much of the equipment we acquire must be specifically designed to be compatible for use in our products or for developing and manufacturing our future products, and are only available from a limited number of suppliers, some of whom are our sole-source suppliers. We are therefore dependent on these suppliers to be able and willing to dedicate adequate engineering resources to develop components that can be successfully integrated into our products, technology and equipment.

From time to time, our suppliers have experienced difficulty meeting our requirements. If we are unable to purchase sufficient quantities from our current suppliers or qualify and engage additional suppliers, we may not be able to meet demand for our products. Delays or cost increases experienced by our suppliers in developing or sourcing materials and components for use in our products or incompatibility or quality issues relating to our products, could also harm our financial results as well as business relationships with our customers. We do not have long-term contracts with some of our existing suppliers, nor do we always have guaranteed manufacturing capacity with our suppliers and, therefore, we cannot guarantee that they will devote sufficient resources or capacity to manufacturing our products. Any significant problems that occur at our suppliers, or their failure to perform at the level we expect, could lead to product shortages or quality assurance problems, either of which would harm our operating results and financial condition. In addition, if we are unable to purchase sufficient quantities from our current suppliers, we may not be able to engage alternative suppliers who are able or willing to provide goods or services in sufficient quantities or at a cost acceptable to us.

In addition, our supply base has experienced industry consolidation. Our suppliers may be acquired by our competitors, consolidate, decide to exit the industry, or redirect their investments and increase costs to us, each of which may have an adverse effect on our business and operations. In addition, some of our suppliers have experienced a decline in financial performance. Where we rely on a limited number of suppliers or a single supplier, the risk of supplier loss due to industry consolidation or a decline in financial performance is enhanced. Some of our suppliers may also be competitors in other areas of our business, which could lead to difficulties in price negotiations or meeting our supply requirements. Any disruption in our supply chain could reduce our revenue and adversely impact our financial results.

See the risk factors entitled “*We rely substantially on our business ventures with Toshiba Memory Corporation (“TMC”) for the supply of flash-based memory and the development of flash-based technology, which subjects us to risks and uncertainties that could harm our business, financial condition and operating results*” and “*Our strategic relationships subject us to risks that could adversely affect our business, financial condition and results of operations*” for additional risks related to our supply of flash memory and our strategic relationships.

Price volatility, shortages of critical materials or components, or use by other industries of materials and components used in the storage industry, or contractual commitments we enter into with suppliers to reduce the risk of component shortages, could increase our costs and may negatively impact our operating results.

Increases in the cost for certain critical materials and components and oil may increase our costs of manufacturing and transporting our products and key components and may result in lower operating margins if we are unable to pass these increased costs on to our customers. Shortages of critical components such as DRAM, flash-based memory and multi-layer ceramic capacitors (MLCC), or materials such as glass substrates, stainless steel, aluminum, nickel, neodymium, ruthenium, platinum or cerium, may increase our costs and may result in lower operating margins if we are unable to find ways to mitigate these increased costs. We or our suppliers acquire certain precious metals and rare earth metals like ruthenium, platinum, neodymium and cerium, which are critical to the manufacture of components in our products from a number of countries, including the People’s Republic of China. The government of China has imposed restrictions (such as trade and tariff actions) and China or other nations may impose other restrictions, quotas or embargoes upon these metals that would restrict the worldwide supply of such metals or increase their cost, both of which could negatively impact our operating results until alternative suppliers are sourced. Furthermore, if other high volume industries increase their demand for materials or components used in our products, our costs may further increase, which could have an adverse effect on our operating margins. In addition, shortages in other components and materials used in our customers’ products could result in a decrease in demand for our products, which would negatively impact our operating results.

To reduce the risk of component shortages, we attempt to provide significant lead times when buying components, which may subject us to cancellation charges if we cancel orders as a result of technology transitions or changes in our component needs. In addition, we may from time to time enter into contractual commitments with component suppliers in an effort to increase and stabilize the supply of those components and enable us to purchase such components at favorable prices. Some of these commitments may require us to buy a substantial number of components from the supplier or make significant cash advances to the supplier; however, these commitments may not result in a satisfactory increase or stabilization of the supply of such components and may cause us to have inadequate or excess component inventory, which could increase our operating costs and adversely affect our operating results.

The loss of our key executive management, staff and skilled employees, the inability to hire and integrate new employees or decisions to realign our business could negatively impact our business prospects.

Our success depends upon the continued contributions of our key management, staff and skilled employees, many of whom would be extremely difficult to replace. Global competition for skilled employees in the data storage industry is intense and, as we attempt to move to a position of technology leadership in the storage industry, our business success becomes increasingly dependent on our ability to retain our key staff and skilled employees, to attract, integrate and retain new skilled employees, including employees from acquisitions, and to make decisions to realign our business to take advantage of efficiencies or reduce redundancies. Volatility or lack of positive performance in our stock price and the overall markets may adversely affect our ability to retain key staff or skilled employees who have received equity compensation. Additionally, because a substantial portion of our key employees' compensation is placed "at risk" and linked to the performance of our business, when our operating results are negatively impacted, we may be at a competitive disadvantage for retaining and hiring key management, staff and skilled employees versus other companies that may pay a relatively higher portion of fixed salary. If we lose our existing key management, staff or skilled employees, or are unable to hire and integrate new key management, staff or skilled employees, or if we fail to implement succession plans for our key management or staff, our operating results would likely be harmed. Furthermore, if we do not realize the anticipated benefits of our intended realignment after we make decisions regarding our personnel and implement our realignment plans, our operating results could be adversely affected.

Our operations, and those of certain of our suppliers and customers, are concentrated in large, purpose-built facilities, subjecting us to substantial risk of damage or loss if operations at any of these facilities are disrupted.

As a result of our cost structure and strategy of vertical integration, we conduct our operations at large, high volume, purpose-built facilities in California and throughout Asia. The current concentration of Flash Ventures in Yokkaichi, Japan, magnifies the risks of supply disruption. The facilities of many of our customers, our suppliers and our customers' suppliers are also concentrated in certain geographic locations throughout Asia and elsewhere. A fire, flood, earthquake, tsunami or other natural disaster, condition or event such as a power outage, political instability, civil unrest, localized labor unrest or other employment issues, or a localized health risk that adversely affects any of these facilities or the employees or logistics operators at these facilities, would significantly affect our ability to manufacture or sell our products, which would result in a substantial loss of sales and revenue and a substantial harm to our operating results. In addition, the geographic concentration of our manufacturing sites could exacerbate the negative impacts resulting from any of these problems. A significant event that impacts any of our manufacturing sites, or the sites of our customers or suppliers, could adversely affect our ability to manufacture or sell our products, and our business, financial condition and results of operations could suffer.

We may incur losses beyond the limits of, or outside the scope of, the coverage of our insurance policies. There can be no assurance that in the future we will be able to maintain existing insurance coverage or that premiums will not increase substantially. Due to market availability, pricing or other reasons, we may elect not to purchase insurance coverage or to purchase only limited coverage. We maintain limited insurance coverage and, in some cases, no coverage at all, for natural disasters and environmental damages, as these types of insurance are sometimes not available or available only at a prohibitive cost. We depend upon TMC to obtain and maintain sufficient property, business interruption and other insurance for Flash Ventures. If TMC fails to do so, we could suffer significant unreimbursable losses, and such failure could also cause Flash Ventures to breach various financing covenants.

Manufacturing, marketing and selling our products globally subjects us to numerous risks.

Currently, a large portion of our revenue is derived from our international operations, and many of our products and components are produced overseas. Our revenue and future growth is significantly dependent on the growth of international markets, and we may face difficulties in entering or maintaining international sales markets. We are subject to risks associated with our global manufacturing operations and global marketing and sales efforts, as well as risks associated with our utilization of and reliance on contract manufacturers, including:

- obtaining requisite governmental permits and approvals, compliance with foreign laws and regulations, changes in foreign laws and regulations;
- the need to comply with regulations on international business, including the Foreign Corrupt Practices Act, the United Kingdom Bribery Act 2010, the anti-bribery laws of other countries and rules regarding conflict minerals;
- currency exchange rate fluctuations or restrictions;

- political and economic instability, civil unrest and natural disasters;
- limited transportation availability, delays, and extended time required for shipping, which risks may be compounded in periods of price declines;
- higher freight rates;
- labor challenges, including difficulties finding and retaining talent or responding to labor disputes or disruptions;
- trade restrictions, such as export controls, export bans, embargos, sanctions and license and certification requirements (including on encryption technology), new or increased tariffs and fees and complex customs regulations;
- copyright levies or similar fees or taxes imposed in European and other countries;
- exchange, currency and tax controls and reallocations;
- increasing labor and overhead costs;
- weaker protection of IP rights;
- difficulties in managing international operations, including appropriate internal controls; and
- loss or non-renewal of favorable tax treatment under agreements or treaties with foreign tax authorities.

As a result of these risks, our business, results of operations or financial condition could be adversely affected. Some of these risks, such as trade restrictions, higher tariffs and fees, import and export restrictions or loss of favorable tax treatment under agreements or treaties with foreign tax authorities, could increase as a result of changes to trade agreements, policies, rules and regulations. For example, beginning in early 2018, the U.S. commenced certain trade actions, including proposed new and increased tariffs on an evolving list of imported materials and products. Countries have responded to these actions in various ways, including proposed tariff increases on products imported from the U.S. We cannot predict whether, or to what extent, there may be changes to international trade agreements or whether tariffs, export controls, or other restrictions may be changed or imposed on our products, our customers or our supply chain. Such tariffs, policy or regulatory changes, international trade agreements or trade restrictions have in the past adversely affected and may in the future adversely affect our ability to sell to certain customers or could increase our cost of doing business, which could adversely affect our operating results and financial condition.

We experience sales seasonality and cyclicity, which could cause our operating results to fluctuate.

Sales of computer systems, mobile devices, storage subsystems, gaming consoles and consumer electronics tend to be seasonal and cyclical, and therefore we expect to continue to experience seasonality and cyclicity in our business as we respond to variations in our customers' demand for our products. However, changes in seasonal and cyclical patterns have made it, and could continue to make it, more difficult for us to forecast demand, especially as a result of the current macroeconomic environment. Changes in the product or channel mix of our business can also impact seasonal and cyclical patterns, adding complexity in forecasting demand. Seasonality and cyclicity also may lead to higher volatility in our stock price. It is difficult for us to evaluate the degree to which seasonality and cyclicity may affect our stock price or business in future periods because of the rate and unpredictability of product transitions and new product introductions and macroeconomic conditions.

If we fail to identify, manage, complete and integrate acquisitions, investment opportunities or other significant transactions, which are a key part of our growth strategy, it may adversely affect our future results.

We seek to be an industry-leading developer, manufacturer and provider of innovative storage solutions, balancing our core hard drive and flash memory business with growing investments in newer areas that we believe will provide us with higher growth opportunities. Acquisitions of, investment opportunities in, or other significant transactions with companies that are complementary to our business are a key part of our overall business strategy. In order to pursue this part of our growth strategy successfully, we must continue to identify attractive acquisition or investment opportunities, successfully complete the transactions, some of which may be large and complex, and manage post-closing issues such as integration of the acquired company or employees. We may not be able to continue to identify or complete appealing acquisition or investment opportunities given the intense competition for these transactions. We are also subject to certain covenants in our debt agreements that place limits on our ability to complete acquisitions and investments. Even if we identify and complete suitable corporate transactions, we may not be able to successfully address any integration challenges in a timely manner, or at all. Failing to successfully integrate or realign our business to take advantage of efficiencies or reduce redundancies of an acquisition may result in not realizing all or any of the anticipated benefits of the acquisition. In addition, failing to achieve the financial model projections for an acquisition or changes in technology development and related roadmaps following an acquisition may result in the incurrence of impairment charges and other expenses, both of which could adversely impact our results of operations or financial condition. Acquisitions and investments may also result in the issuance of equity securities that may be dilutive to our shareholders and the issuance of additional indebtedness that would put additional pressure on liquidity. Furthermore, we may agree to provide continuing service obligations or enter into other agreements in order to obtain certain regulatory approvals of our corporate transactions, and failure to satisfy these additional obligations could result in our failing to obtain regulatory approvals or the imposition of additional obligations on us, any of which could adversely affect our business, financial condition and results of operations. In addition, new legislation or additional regulations may affect or impair our ability to invest with or in certain other countries or require us to obtain regulatory approvals to do so, including investments in joint ventures, minority investments and outbound technology transfers to certain countries

Any cost saving initiatives or restructurings that we undertake may not deliver the results we expect, which may adversely affect our business.

From time to time, we engage in cost saving initiatives and restructurings that may result in workforce reduction and consolidation of our manufacturing or other facilities. As a result of any cost saving initiatives or restructurings, we may experience a loss of continuity, loss of accumulated knowledge, disruptions to our operations and inefficiency during transitional periods. These actions could also impact employee retention. In addition, we cannot be sure that these actions will be as successful in reducing our overall expenses as we expect or that additional costs will not offset any such reductions or consolidations. If our operating costs are higher than we expect or if we do not maintain adequate control of our costs and expenses, our operating results could be adversely affected.

Changes in demand for our products, changes in product life cycles and the failure to qualify our products and achieve design wins with our customers could adversely affect our sales, margins, ASPs and our ability to recover the cost of product development.

Events or circumstances that impact demand in the markets for our products, or our inability to address that demand successfully, could materially adversely impact our operating results. For example, demand for our products may be affected by, among other factors, the following:

- inconsistent demand from customers whose sales are correlated to large projects and expansions which can be sporadic;
- internal customer development of storage solutions;
- developments in the regulation and enforcement of digital rights management;
- emergence of new technologies;
- volatility in demand due to differing patterns of technology adoption and innovation; or
- concerns about data protection by end users.

If we are not able to respond to these or other events or circumstances that impact demand for our products, it could lead to our customers' storage needs being satisfied by competing storage technologies, thereby decreasing our sales. As a result, even with increasing aggregate demand for digital storage, if we fail to anticipate or timely respond to the demand for storage, our sales, ASPs and gross margin could decline, which could adversely affect our operating results and financial condition.

Product life cycles may lengthen or shorten, both of which could adversely affect gross margins or our ability to recover the cost of product development.

We regularly engage in new product qualification with our customers, and the product qualification process may be lengthy for some customers. Once a product is accepted for qualification testing, failures or delays in the qualification process can result in delayed or reduced product sales, reduced product margins or lost sales to that customer until the next generation of products is introduced. Even if our products meet customer specifications, our sales to these customers are dependent upon the customers choosing our products over those of our competitors and purchasing our products in sufficient volume, our ability to supply our products in sufficient quantity and in a timely manner and, with respect to OEM partners, the OEMs' ability to create, market and successfully sell products containing our solutions.

Our high level of debt may have an adverse impact on our liquidity, restrict our current and future operations, particularly our ability to respond to business opportunities, and increase our vulnerability to adverse economic and industry conditions.

As of December 28, 2018, our total indebtedness was \$10.80 billion in aggregate principal, and we had \$2.25 billion of additional borrowing availability under our revolving credit facility.

Our high level of debt could have significant consequences, which include, but are not limited to, the following:

- limiting our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions or other general corporate purposes;
- requiring a substantial portion of our cash flows to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, acquisitions, R&D and other general corporate purposes;
- imposing financial and other restrictive covenants on our operations, including limiting our ability to (i) declare or pay dividends or repurchase shares of our common stock; (ii) purchase assets, make investments, complete acquisitions, consolidate or merge with or into, or sell all or substantially all of our assets to, another person; (iii) dispose of assets; (iv) incur liens; and (v) enter into transactions with affiliates;
- placing us at a competitive disadvantage to competitors carrying less debt; and
- making us more vulnerable to economic downturns and limiting our ability to withstand competitive pressures or take advantage of new opportunities to grow our business.

Our ability to meet the debt service obligations and to comply with the financial and other restrictive covenants contained in our debt agreements will depend on our cash flows and future performance, which will be affected by financial, business, economic and other factors. Our bank debt also contains a variable interest rate component based on our corporate credit ratings, which could result in increased interest rates and debt service obligations if our ratings were to decline. If we are unable to meet our debt service obligations or should we fail to comply with our financial and other restrictive covenants contained in the agreements governing our indebtedness, it could result in an event of default under the applicable indebtedness. We may be unable to cure, or obtain a waiver of, an event of default or otherwise amend our debt agreements to prevent an event of default thereunder on terms acceptable to us or at all. In that event, the debt holders could accelerate the related debt, which may result in the cross-acceleration or cross-default of other debt, leases or other obligations. If we are required to repay our indebtedness before the applicable due dates, we may not have sufficient funds available and we may be required to refinance all or part of our debt, sell important strategic assets at unfavorable prices, incur additional indebtedness or issue common stock or other equity securities, which we may be unable to do on terms acceptable to us, in amounts sufficient to meet our needs or at all. Our inability to service our debt obligations or refinance our debt could have a material adverse effect on our business, operating results and financial condition. Further, if we are unable to repay, refinance or restructure our secured indebtedness, the holder of such debt could proceed against the collateral securing that indebtedness. Refinancing our indebtedness may also require us to expense previous debt issuance costs or to incur new debt issuance costs.

In addition to our credit ratings impacting the interest rate on our current debt, our ratings impact the cost and availability of future borrowings and, accordingly, our cost of capital. Our ratings reflect the opinions of the ratings agencies of our financial strength, operating performance and ability to meet our debt obligations. There can be no assurance that we will achieve a particular rating or maintain a particular rating in the future.

Our credit agreement uses LIBOR as a reference rate for our term loans and revolving credit facility, such that the interest rate applicable to such loans may, at our option, be calculated based on LIBOR. In July 2017, the U. K.'s Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. The U.S. Federal Reserve has begun publishing a Secured Overnight Funding Rate ("SOFR"), which is intended to replace U.S. dollar LIBOR. Plans for alternative reference rates for other currencies have also been announced. At this time, we cannot predict how markets will respond to these proposed alternative rates or the effect of any changes to LIBOR or the discontinuation of LIBOR. If LIBOR is no longer available or if our lenders have increased costs due to changes in LIBOR, we may experience potential increases in interest rates on our variable rate debt, which could adversely impact our interest expense, results of operations and cash flows.

We may from time to time seek to further refinance our substantial indebtedness by issuing additional shares of our common stock in one or more securities offerings. These securities offerings may dilute our existing shareholders, reduce the value of our common stock, or both. Because our decision to issue securities will depend on, among other things, market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future securities offerings. Thus, holders of our common stock bear the risk of our future offerings diluting and potentially reducing the value of our common stock.

Changes in tax laws could increase our worldwide tax rate and materially affect our financial position and results of operations.

On December 22, 2017, the President of the United States of America signed the Tax Cuts and Jobs Act (the "2017 Act"), which includes a broad range of tax reform proposals affecting businesses, including a reduction in the U.S. federal corporate tax rate from 35% to 21%, a one-time mandatory deemed repatriation tax on earnings of certain foreign subsidiaries that were previously tax deferred, and a new minimum tax on certain foreign earnings. The 2017 Act significantly impacted our effective tax rate for fiscal year 2018 and also impacted our effective tax rate for the first and second quarters of fiscal 2019. Taxes due over a period of time as a result of the 2017 Act could be accelerated upon certain triggering events, including failure to pay such taxes when due. We have completed our analysis of the impact of the 2017 Act within the one-year measurement period allowed by the Securities and Exchange Commission. However, we may see future regulatory, administrative or legislative guidance which may further impact our effective tax rate.

In addition, many countries in the European Union and around the globe have adopted and/or proposed changes to current tax laws. Further, organizations such as the Organization for Economic Cooperation and Development, have published action plans that, if adopted by countries where we do business, could increase our tax obligations in these countries. Due to the large scale of our U.S. and international business activities, many of these enacted and proposed changes to the taxation of our activities could increase our worldwide effective tax rate and harm our financial position and results of operations.

We are subject to risks associated with loss or non-renewal of favorable tax treatment under agreements or treaties with foreign tax authorities.

Portions of our operations are subject to a reduced tax rate or are free of tax under various tax holidays that expire in whole or in part from time to time, or may be terminated if certain conditions are not met. Although many of these holidays may be extended when certain conditions are met, we may not be able to meet such conditions. If the tax holidays are not extended, or if we fail to satisfy the conditions of the reduced tax rate, then our effective tax rate could increase in the future.

From time to time we may become subject to income tax examinations or similar proceedings, and as a result we may incur additional costs and expenses or owe additional taxes, interest and penalties that may negatively impact our operating results.

We are subject to income taxes in the U.S. and certain foreign jurisdictions, and our determination of our tax liability is subject to review by applicable domestic and foreign tax authorities. For example, as we have previously disclosed, we are under examination by the Internal Revenue Service for certain fiscal years and in connection with that examination, we received a statutory notice of deficiency seeking certain adjustments to income and have filed a petition with the U.S. Tax Court as disclosed in Part I, Item 1, Note 11, *Income Tax Expense*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q. Although we believe our tax positions are properly supported, the final timing and resolution of any tax examinations are subject to significant uncertainty and could result in our having to pay amounts to the applicable tax authority in order to resolve examination of our tax positions, which could result in an increase or decrease of our current estimate of unrecognized tax benefits and may negatively impact our financial position, results of operations or cash flows.

If our technology infrastructure, systems or products are compromised, damaged or interrupted by cyber attacks, data security breaches, other security problems, security vulnerabilities or design defects, or sustain system failures, our operating results and financial condition could be adversely affected.

We experience cyber attacks of varying degrees on our technology infrastructure and systems and, as a result, unauthorized parties have obtained in the past, and may in the future obtain, access to our computer systems and networks, including cloud-based platforms. The technology infrastructure and systems of our suppliers, vendors, service providers, cloud solution providers and partners have in the past experienced and may in the future experience such attacks. Cyber attacks can include computer viruses, computer denial-of-service attacks, worms, and other malicious software programs or other attacks, covert introduction of malware to computers and networks, impersonation of authorized users, and efforts to discover and exploit any design flaws, bugs, security vulnerabilities or security weaknesses, as well as intentional or unintentional acts by employees or other insiders with access privileges, intentional acts of vandalism by third parties and sabotage. In some instances, efforts to correct vulnerabilities or prevent attacks may reduce the performance of our computer systems and networks, which could negatively impact our business. We believe cyber attack attempts are increasing in number and that cyber attackers are developing increasingly sophisticated systems and means to not only attack systems, but also to evade detection or to obscure their activities. Our products are also targets for cyber attacks, including those products utilized in cloud-based environments as well as our cloud service offerings. While some of our products contain encryption or security algorithms to protect third-party content or user-generated data stored on our products, these products could still be hacked or the encryption schemes could be compromised, breached, or circumvented by motivated and sophisticated attackers. We have agreed with certain customers and strategic partners, including TMC, to undertake certain commitments to promote information security, and we may be liable to TMC or such other parties if we fail to meet our cyber security commitments.

In addition, our technology infrastructure and systems are vulnerable to damage or interruption from natural disasters, power loss and telecommunications failures. Further, our products contain sophisticated hardware and operating system software and applications that may contain security problems, security vulnerabilities, or defects in design or manufacture, including “bugs” and other problems that could interfere with the intended operation of our products.

If efforts to breach our infrastructure, systems or products are successful or we are unable to protect against these risks, we could suffer interruptions, delays, or cessation of operations of our systems, and loss or misuse of proprietary or confidential information, IP, or sensitive or personal information. Breaches of our infrastructure, systems or products could also cause our customers and other affected third parties to suffer loss or misuse of proprietary or confidential information, IP, or sensitive or personal information, and could harm our relationships with customers and other third parties. As a result, we could experience additional costs, indemnification claims, litigation, and damage to our brand and reputation. All of these consequences could harm our reputation and our business and materially and adversely affect our operating results and financial condition.

Sales in the distribution channel and to the retail market are important to our business, and if we fail to respond to demand changes within these markets, or maintain and grow our applicable market share, our operating results could suffer.

Our distribution customers typically sell to small computer manufacturers, dealers, systems integrators and other resellers. We face significant competition in this channel as a result of limited product qualification programs and a significant focus on price and availability of product. In addition, the PC market is experiencing a shift to notebook and other mobile devices and, as a result, more computing devices are being delivered to the market as complete systems, which could weaken the distribution market. If we fail to respond to changes in demand in the distribution market, our operating results could suffer. Additionally, if the distribution market weakens as a result of a slowing PC growth rate, technology transitions or a significant change in consumer buying preference, or if we experience significant price declines due to demand changes in the distribution channel, then our operating results would be adversely affected. Negative changes in the credit-worthiness or the ability to access credit, or the bankruptcy or shutdown of any of our significant retail or distribution partners would harm our revenue and our ability to collect outstanding receivable balances.

A significant portion of our sales is also made through retailers. Our success in the retail market depends in large part on our ability to maintain our brand image and corporate reputation and to expand into and gain market acceptance of our products in multiple retail market channels. Particularly in the retail market, adverse publicity, whether or not justified, or allegations of product or service quality issues, even if false or unfounded, could damage our reputation and cause our customers to choose products offered by our competitors. If customers no longer maintain a preference for our product brands or if our retailers are not successful in selling our products, our operating results may be adversely affected.

Loss of market share with or by a key customer, or consolidation among our customer base, could harm our operating results.

During the three months ended December 28, 2018, 47% of our revenue came from sales to our top 10 customers. These customers have a variety of suppliers to choose from and therefore can make substantial demands on us, including demands on product pricing and on contractual terms, often resulting in the allocation of risk to us as the supplier. Our ability to maintain strong relationships with our principal customers is essential to our future performance. If we lose a key customer, if our sales to a key customer are prohibited by law, regulation or other government action, if any of our key customers reduce their orders of our products or require us to reduce our prices before we are able to reduce costs, if a customer is acquired by one of our competitors or if a key customer suffers financial hardship, our operating results and financial condition would likely be harmed.

Additionally, if there is consolidation among our customer base, our customers may be able to command increased leverage in negotiating prices and other terms of sale, which could adversely affect our profitability. Consolidation among our customer base may also lead to reduced demand for our products, increased customer pressure on our prices, replacement of our products by the combined entity with those of our competitors and cancellations of orders, each of which could harm our operating results.

Also, the storage ecosystem is constantly evolving, and our traditional customer base is changing. Fewer companies now hold greater market share for certain applications and services, such as mobile, social media, shopping and streaming media. As a result, the competitive landscape is changing, giving these companies increased leverage in negotiating prices and other terms of sale, which could adversely affect our profitability. In addition, the changes in our evolving customer base create new selling and distribution patterns to which we must adapt. To remain competitive, we must respond to these changes by ensuring we have proper scale in this evolving market, as well as offer products that meet the technological requirements of this customer base at competitive pricing points. To the extent we are not successful in adequately responding to these changes, our operating results and financial condition could be harmed.

We make significant investments in R&D to improve our technology and develop new technologies, and unsuccessful investments or investments that are not cost effective could materially adversely affect our business, financial condition and results of operations.

We make significant R&D investments to maintain our existing products and to lead innovation and development of new technologies. In addition, we may increase our capital expenditures and expenses above our historical run-rate model in order to remain competitive. The challenges of reducing operating costs could result in more costly capital expenditures that reduce the cost benefits of technology transitions and could limit our ability to keep pace with reductions in ASPs. Our R&D investments may not result in viable technologies or products, and even if they do result in viable technologies or products, they may not be profitable or accepted by the market. In addition, if we are not able to improve our technology or develop new technologies at the same rate as our competitors or at a rate that is expected by our customers, we may be required to incur additional costs to meet demand without corresponding incremental revenue, which could negatively impact our operating margins and make achieving historical levels of cost reduction difficult or unlikely. Significant investments in unsuccessful or cost-ineffective R&D efforts could materially adversely affect our business, financial condition and results of operations. In addition, increased investments in technology could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results.

We are subject to risks related to product defects or the unintended use or security breaches of our products, which could result in product recalls or epidemic failures and could subject us to warranty claims in excess of our warranty provisions or which are greater than anticipated, litigation or indemnification claims.

We warrant the majority of our products for periods of one to five years. We test our products in our manufacturing facilities through a variety of means. However, our testing may fail to reveal defects in our products that may not become apparent until after the products have been sold into the market. In addition, our products may be used in a manner that is not intended or anticipated by us, resulting in potential liability. Accordingly, there is a risk that product defects will occur, which could require a product recall. Product recalls can be expensive to implement. As part of a product recall, we may be required or choose to replace the defective product. Moreover, there is a risk that product defects may trigger an epidemic failure clause in a customer agreement. If an epidemic failure occurs, we may be required to replace or refund the value of the defective product and to cover certain other costs associated with the consequences of the epidemic failure. In addition, product defects, product recalls or epidemic failures may cause damage to our reputation or customer relationships, lost revenue, indemnification for a recall of our customers' products, warranty claims, litigation or loss of market share with our customers, including our OEM and original design manufacturers ("ODM") customers. Our business liability insurance may be inadequate or future coverage may be unavailable on acceptable terms, which could adversely impact our operating results and financial condition.

Our standard warranties contain limits on damages and exclusions of liability for consequential damages and for misuse, improper installation, alteration, accident or mishandling while in the possession of someone other than us. We record an accrual for estimated warranty costs at the time revenue is recognized. We may incur additional expenses if our warranty provision do not reflect the actual cost of resolving issues related to defects in our products, whether as a result of a product recall, epidemic failure or otherwise. If these additional expenses are significant, it could adversely affect our business, financial condition and operating results.

Certain of our products contain encryption or security algorithms to protect third party content and user-generated data stored on our products. To the extent our products are hacked or the encryption schemes are compromised or breached, this could harm our business by hurting our reputation, requiring us to employ additional resources to fix the errors or defects and expose us to litigation and indemnification claims.

In addition, third-party components or applications that we incorporate or use in our products may contain defects in design or manufacturing that could unexpectedly result in epidemic failures, security vulnerabilities or performance issues and subject us to liability.

We and certain of our officers are at times involved in litigation, investigations and governmental proceedings, which may be costly, may divert the efforts of our key personnel and could result in adverse court rulings, fines or penalties, which could materially harm our business.

We are involved in litigation, including cases involving our IP rights and those of others, antitrust and commercial matters, putative securities class action suits and other actions. We are the plaintiff in some of these actions and the defendant in others. Some of the actions seek injunctive relief, including injunctions against the sale of our products, and substantial monetary damages, which if granted or awarded, could materially harm our business, financial condition and operating results. From time to time, we may also be the subject of inquiries, requests for information, investigations and actions by government and regulatory agencies regarding our businesses. Any such matters could result in material adverse consequences to our results of operations, financial condition or ability to conduct our business, including fines, penalties or restrictions on our business activities.

Litigation is subject to inherent risks and uncertainties that may cause actual results to differ materially from our expectations. In the event of an adverse outcome in any litigation, investigation or governmental proceeding, we could be required to pay substantial damages, fines or penalties and cease certain practices or activities, including the manufacture, use and sale of products. With or without merit, such matters can be complex, can extend for a protracted period of time, can be very expensive and the expense can be unpredictable. Litigation initiated by us could also result in counter-claims against us, which could increase the costs associated with the litigation and result in our payment of damages or other judgments against us. In addition, litigation, investigations or governmental proceedings and any related publicity may divert the efforts and attention of some of our key personnel and may also harm the market prices of our securities.

We may be obligated to indemnify our current or former directors or employees, or former directors or employees of companies that we have acquired, in connection with litigation, investigations or governmental proceedings. These liabilities could be substantial and may include, among other things: the costs of defending lawsuits against these individuals; the cost of defending shareholder derivative suits; the cost of governmental, law enforcement or regulatory investigations or proceedings; civil or criminal fines and penalties; legal and other expenses; and expenses associated with the remedial measures, if any, which may be imposed.

We are subject to laws, rules, and regulations in the U.S. and other countries relating to the collection, use, sharing, and security of third-party data including personal data, and our failure to comply with these laws, rules and regulations could subject us to proceedings by governmental entities or others and cause us to incur penalties, significant legal liability, or loss of customers, loss of revenue, and reputational harm.

We are subject to laws, rules, and regulations in the U.S. and other countries relating to the collection, use, and security of third-party data including data that relates to or identifies an individual person. In many cases, these laws apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, and among us, our subsidiaries and other parties with which we have commercial relations. Our possession and use of third-party data, including personal data and employee data in conducting our business, subjects us to legal and regulatory burdens that may require us to notify vendors, customers or employees or other parties with which we have commercial relations of a data security breach and to respond to regulatory inquiries and to enforcement proceedings. Global privacy and data protection legislation, enforcement, and policy activity in this area are rapidly expanding and evolving, and may be inconsistent from jurisdiction to jurisdiction. Compliance requirements and even our inadvertent failure to comply with applicable laws may cause us to incur substantial costs, subject us to proceedings by governmental entities or others, and cause us to incur penalties or other significant legal liability, or lead us to change our business practices.

The nature of our industry and its reliance on IP and other proprietary information subjects us and our suppliers, customers and partners to the risk of significant litigation.

The data storage industry has been characterized by significant litigation. This includes litigation relating to patent and other IP rights, product liability claims and other types of litigation. We have historically been involved in frequent disputes regarding patent and other IP rights, and we have in the past received, and we may in the future receive, communications from third parties asserting that certain of our products, processes or technologies infringe upon their patent rights, copyrights, trademark rights or other IP rights. We may also receive claims of potential infringement if we attempt to license IP to others. IP risks increase when we enter into new markets where we have little or no IP protection as a defense against litigation. The complexity of the technology involved and the uncertainty of IP litigation increase the IP risks we face. Litigation can be expensive, lengthy and disruptive to normal business operations. Moreover, the results of litigation are inherently uncertain and may result in adverse rulings or decisions. We may be subject to injunctions, enter into settlements or be subject to judgments that may, individually or in the aggregate, have a material adverse effect on our business, financial condition or operating results.

If we incorporate third-party technology into our products or if claims or actions are asserted against us for alleged infringement of the IP of others, we may be required to obtain a license or cross-license, modify our existing technology or design a new non-infringing technology. Such licenses or design modifications can be extremely costly. We evaluate notices of alleged patent infringement and notices of patents from patent holders that we receive from time to time. We may decide to settle a claim or action against us, which settlement could be costly. We may also be liable for any past infringement. If there is an adverse ruling against us in an infringement lawsuit, an injunction could be issued barring production or sale of any infringing product. It could also result in a damage award equal to a reasonable royalty or lost profits or, if there is a finding of willful infringement, treble damages. Any of these results would increase our costs and harm our operating results. In addition, our suppliers, customers and partners are subject to similar risks of litigation, and a material, adverse ruling against a supplier, customer or partner could negatively impact our business.

Moreover, from time to time, we agree to indemnify certain of our suppliers and customers for alleged IP infringement. The scope of such indemnity varies but may include indemnification for direct and consequential damages and expenses, including attorneys' fees. We may be engaged in litigation as a result of these indemnification obligations. Third party claims for patent infringement are excluded from coverage under our insurance policies. A future obligation to indemnify our customers or suppliers may harm our business, financial condition and operating results.

Our reliance on IP and other proprietary information subjects us to the risk that these key ingredients of our business could be copied by competitors.

Our success depends, in significant part, on the proprietary nature of our technology, including non-patentable IP such as our process technology. We primarily rely on patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods, to protect our proprietary technologies and processes. There can be no assurance that our existing patents will continue to be held valid, if challenged, or that they will have sufficient scope or strength to protect us. It is also possible that competitors or other unauthorized third parties may obtain, copy, use or disclose, illegally or otherwise, our proprietary technologies and processes, despite our efforts to protect our proprietary technologies and processes. If a competitor is able to reproduce or otherwise capitalize on our technology despite the safeguards we have in place, it may be difficult, expensive or impossible for us to obtain necessary legal protection. There are entities whom we believe may infringe our IP. Enforcement of our rights often requires litigation. If we bring a patent infringement action and are not successful, our competitors would be able to use similar technology to compete with us. Moreover, the defendant in such an action may successfully countersue us for infringement of their patents or assert a counterclaim that our patents are invalid or unenforceable. Also, the laws of some foreign countries may not protect our IP to the same extent as do U.S. laws. In addition to patent protection of IP rights, we consider elements of our product designs and processes to be proprietary and confidential. We rely upon employee, consultant and vendor non-disclosure agreements and contractual provisions and a system of internal safeguards to protect our proprietary information. However, any of our registered or unregistered IP rights may be challenged or exploited by others in the industry, which could harm our operating results.

The success of our branded products depends in part on the positive image that consumers have of our brands. We believe the popularity of our brands makes them a target of counterfeiting or imitation, with third parties attempting to pass off counterfeit products as our products. Any occurrence of counterfeiting, imitation or confusion with our brands could adversely affect our reputation and impair the value of our brands, which in turn could negatively impact sales of our branded products, our share and our gross margin, as well as increase our administrative costs related to brand protection and counterfeit detection and prosecution.

The costs of compliance with state, federal and international legal and regulatory requirements, such as environmental, labor, trade, health, safety, data privacy, anti-corruption and tax regulations, customers' standards of corporate citizenship, and industry and coalition standards, such as those established by the Responsible Business Alliance ("RBA"), could cause an increase in our operating costs.

We are subject to, and may become subject to additional, state, federal and international laws and regulations governing our environmental, labor, trade, health, safety, data privacy, anti-corruption and tax practices. These laws and regulations, particularly those applicable to our international operations, are or may be complex, extensive and subject to change. We will need to ensure that we and our suppliers and partners timely comply with such laws and regulations, which may result in an increase in our operating costs. Legislation has been, and may in the future be, enacted in locations where we manufacture or sell our products. In addition, climate change and financial reform legislation is a significant topic of discussion and has generated and may continue to generate federal, international or other regulatory responses in the near future. If we or our suppliers or partners fail to timely comply with applicable legislation, our customers may refuse to purchase our products or we may face increased operating costs as a result of taxes, fines or penalties, or legal liability and reputational damage, which would have a materially adverse effect on our business, operating results and financial condition.

In connection with our compliance with environmental laws and regulations, as well as our compliance with industry and coalition environmental initiatives, such as those established by the RBA, the standards of business conduct required by some of our customers, and our commitment to sound corporate citizenship in all aspects of our business, we could incur substantial compliance and operating costs and be subject to disruptions to our operations and logistics. In addition, if we were found to be in violation of these laws or noncompliant with these initiatives or standards of conduct, we could be subject to governmental fines, liability to our customers and damage to our reputation and corporate brand which could cause our financial condition and operating results to suffer.

Violation of applicable laws, including labor or environmental laws, and certain other practices by our suppliers, customers or partners could harm our business.

We expect our suppliers, customers and partners to operate in compliance with applicable laws and regulations, including labor and environmental laws, and to otherwise meet our required standards of conduct. While our internal operating guidelines promote ethical business practices, we do not control our suppliers, customers, partners or their labor or environmental practices. The violation of labor, environmental or other laws by any of them, or divergence of their business practices from those generally accepted as ethical, could harm our business by interrupting or otherwise disrupting the shipment of our product components, damaging our reputation, forcing us to find alternate component sources, reducing demand for our products (for example, through a consumer boycott), or exposing us to potential liability for our suppliers', customers' or partners' wrongdoings.

Our failure to accurately forecast market and customer demand for our products, or to quickly adjust to forecast changes, could adversely affect our business and financial results or operating efficiencies.

The data storage industry faces difficulties in accurately forecasting market and customer demand for its products. The variety and volume of products we manufacture are based in part on these forecasts. Accurately forecasting demand has become increasingly difficult for us, our customers and our suppliers in light of the volatility in global economic conditions and industry consolidation, resulting in less availability of historical market data for certain product segments. Further, for many of our OEMs utilizing just-in-time inventory, we do not generally require firm order commitments and instead receive a periodic forecast of requirements, which may prove to be inaccurate. In addition, because our products are designed to be largely interchangeable with competitors' products, our demand forecasts may be impacted significantly by the strategic actions of our competitors. As forecasting demand becomes more difficult, the risk that our forecasts are not in line with demand increases. If our forecasts exceed actual market demand, then we could experience periods of product oversupply, excess inventory, and price decreases, which could impact our sales, ASPs and gross margin, thereby adversely affecting our operating results and our financial condition. If market demand increases significantly beyond our forecasts or beyond our ability to add manufacturing capacity, then we may not be able to satisfy customer product needs, possibly resulting in a loss of market share if our competitors are able to meet customer demands. In addition, some of our components have long lead-times, requiring us to place orders several months in advance of anticipated demand. Such long lead-times increase the risk of excess inventory or loss of sales in the event our forecasts vary substantially from actual demand.

Our vertical integration of some of our products makes us dependent on our ability to timely and cost-effectively develop products with leading technology and overall quality, increasing capital expenditure costs and asset utilization risks for our business.

We develop flash-based memory as well as other non-volatile memory technology through our partnership with TMC; we are also vertically integrated in a substantial portion of the recording heads and magnetic media used in the hard drive products we produce. Consequently, for some of our products, we are more dependent upon our own development and execution efforts and less able to take advantage of technologies developed by other manufacturers. Since we may not have access to alternative technologies that we do not develop internally, we may have to pay royalties in order to access those technologies.

In addition, we may be unsuccessful in timely and cost-effectively developing and manufacturing products using future technologies. We also may not effectively transition our design and technology to achieve acceptable manufacturing yields using the technologies necessary to satisfy our customers' product needs, or we may encounter quality problems with the products we manufacture. If we are unable to timely and cost-effectively develop products with leading technology and overall quality, continuing the cost reductions necessary to maintain adequate gross margin and our ability to sell our products may be significantly diminished, which could materially and adversely affect our business and financial results.

Further, as a result of our vertical integration of some of our products, we make more capital investments and carry a higher percentage of fixed costs than we would if we were not vertically integrated. If our overall level of production decreases for any reason, and we are unable to reduce our fixed costs to match sales, some of our assets may face underutilization that may impact our operating results. We are therefore subject to additional risks related to overall asset utilization, including the need to operate at high levels of utilization to drive competitive costs and the need for assured supply of components that we do not manufacture ourselves. In addition, as a result of adverse labor rates or availability, we may be required to increase investments in automation, which may cause our capital expenditures to increase. If we do not adequately address these challenges, our ongoing operations could be disrupted, resulting in a decrease in our revenue or profit margins and negatively impacting our operating results.

Terrorist attacks may adversely affect our business and operating results.

The continued threat of terrorist activity and other acts of war or hostility have created, and may continue to create, uncertainty in the financial and insurance markets and have significantly increased the political, economic and social instability in some of the geographic areas in which we, our suppliers or our customers operate. Additionally, it is uncertain what impact the reactions to such acts by various governmental agencies and security regulators worldwide will have on shipping costs. Future acts of terrorism, either domestically or abroad, could create further uncertainties and instability. To the extent this results in disruption or delays of our manufacturing capabilities, R&D activities (including our operations in Israel) or shipments of our products, our business, operating results and financial condition could be adversely affected. Any of these events could also increase volatility in the U.S. and world financial markets, which could have a negative effect on our stock price and may limit the capital resources available to us and our customers or suppliers, or adversely affect consumer confidence.

Sudden disruptions to the availability of air transportation, or ocean or land freight lanes, could have an impact on our operations.

We generally ship our products to our customers, and receive shipments from our suppliers, via air, ocean or land freight. The sudden unavailability or disruption of air transportation, cargo operations or ocean, rail or truck freight lanes caused by, among other things, labor difficulties or disputes, severe weather patterns or other natural disasters, or political instability or civil unrest, could impact our operating results by impairing our ability to timely and efficiently receive shipments from our suppliers or deliver our products.

Our license and royalty revenue may fluctuate or decline significantly in the future due to license agreement expirations or renewals, declines in sales of the products or use of technology underlying the license and royalty revenue by our licensees, or if licensees fail to perform on a portion or all of their contractual obligations.

If our existing licensees do not renew their licenses upon expiration, renew or sign new agreements on less favorable terms, exercise their option to terminate the license or fail to exercise their option to extend the licenses, or we are not successful in signing new licensees in the future, our license revenue, profitability and cash provided by operating activities would be harmed and we may incur significant patent litigation costs to enforce our patents against these licensees. As our older patents expire, and the coverage of our newer patents may be different, it may be more difficult to negotiate or renew favorable license agreement terms or a license agreement at all. Our agreements may require us in certain instances to recognize license revenue related to a particular licensee all in one period instead of over time, which could create additional volatility in our licensing revenue. A portion of our license and royalty revenue is based on sales of product categories as well as the underlying technology, and fluctuations in the sales of those products or technology adoption rates would also result in fluctuations in the license and royalty revenue due to us under our agreements. If our licensees or we fail to perform on contractual obligations, we may incur costs to enforce or defend the terms of our licenses and there can be no assurance that our enforcement, defense or collection efforts will be effective. If we license new IP from third parties or existing licensees, we may be required to pay license fees, royalty payments or offset existing license revenue. We may enter into agreements with customers, suppliers or partners that could limit our ability to monetize our IP or could result in us being required to provide IP indemnification to our customers, suppliers or partners. In addition, we may be subject to disputes, claims or other disagreements on the timing, amount or collection of royalties or license payments under our license agreements.

Flash Ventures' equipment lease agreements contain covenants and other cancellation events, and cancellation of the leases would harm our business, operating results and financial condition.

Flash Ventures sells to and leases back from a consortium of financial institutions (“lessors”) a portion of its equipment and Flash Ventures has entered into equipment lease agreements, most of which we and TMC each guarantee half of the total outstanding obligations and some of which we guarantee in full for our share of the Flash Ventures investment. As of December 28, 2018, the portion of outstanding Flash Ventures' lease obligations covered by our guarantees totaled approximately \$1.31 billion, based upon the Japanese yen to U.S. dollar exchange rate at December 28, 2018. The equipment lease agreements contain covenants and cancellation events that are customary for Japanese lease facilities and that relate to Flash Ventures and each of the guarantors. Cancellation events relating to the guarantors include, among other things, an assignment of all or a substantial part of a guarantor's business, a bankruptcy event involving a guarantor and acceleration of other monetary debts of a guarantor above a specified threshold.

The breach of a covenant or the occurrence of another cancellation event could result in an acceleration of the Flash Ventures' lease obligations. If a cancellation event were to occur, Flash Ventures would be required to negotiate a resolution with the lessors, as well as other parties to the lease transactions, to avoid cancellation and acceleration of the lease obligations. Such resolution could include, among other things, supplementary security to be supplied by us, as guarantor, increased interest rates or waiver fees. If a cancellation event occurs and we fail to reach a resolution, we may be required to pay all or a portion of the outstanding lease obligations covered by our guarantees, which would significantly reduce our cash position and may force us to seek additional financing, which may not be available on terms acceptable to us, if at all.

Any decisions to reduce or discontinue paying cash dividends to our shareholders or to reduce or discontinue repurchases of shares of our common stock pursuant to our previously announced stock repurchase program could cause the market price for our common stock to decline.

We may modify, suspend or cancel our cash dividend policy in any manner and at any time. In addition, we may reduce or discontinue repurchases of shares of our common stock as we deem appropriate and as market conditions allow. Any reduction or discontinuance by us of the payment of quarterly cash dividends or the repurchases of our common stock pursuant to our stock repurchase program could cause the market price of our common stock to decline. Moreover, in the event our payment of quarterly cash dividends or repurchases of shares of our common stock are reduced or discontinued, our failure or inability to resume paying cash dividends or repurchasing shares of our common stock at historical levels could cause the market price of our common stock to decline.

Fluctuations in currency exchange rates as a result of our international operations may negatively affect our operating results.

Because we manufacture and sell our products abroad, our revenue, cost of revenue, margins, operating costs and cash flows are impacted by fluctuations in foreign currency exchange rates. If the U.S. dollar exhibits sustained weakness against most foreign currencies, the U.S. dollar equivalents of unhedged manufacturing costs could increase because a significant portion of our production costs are foreign-currency denominated. Conversely, there would not be an offsetting impact to revenues since revenues are substantially U.S. dollar denominated. Additionally, we negotiate and procure some of our component requirements in U.S. dollars from non-U.S. based vendors. If the U.S. dollar weakens against other foreign currencies, some of our component suppliers may increase the price they charge for their components in order to maintain an equivalent profit margin. In addition, our purchases of flash-based memory from Flash Ventures and our investment in Flash Ventures are denominated in Japanese yen. If the Japanese yen appreciates against the U.S. dollar, our cost of purchasing flash-based memory wafers and the cost to us of future capital funding of Flash Ventures would increase, which could negatively impact our operating results. If any of these events occur, they would have a negative impact on our operating results.

Prices for our products are substantially U.S. dollar denominated, even when sold to customers that are located outside the U.S. Therefore, as a substantial portion of our sales are from countries outside the U.S., fluctuations in currency exchanges rates, most notably the strengthening of the U.S. dollar against other foreign currencies, contribute to variations in sales of products in impacted jurisdictions and could adversely impact demand and revenue growth. In addition, currency variations can adversely affect margins on sales of our products in countries outside the U.S.

We attempt to manage the impact of foreign currency exchange rate changes by, among other things, entering into short-term, foreign exchange contracts. However, these contracts do not cover our full exposure, and can be canceled by the counterparty if currency controls are put in place. Thus, our decisions and hedging strategy with respect to currency risks may not be successful and harm our operating results. Further, the ability to enter into foreign exchange contracts with financial institutions is based upon our available credit from such institutions and compliance with covenants and other restrictions. Operating losses, third party downgrades of our credit rating or instability in the worldwide financial markets could impact our ability to effectively manage our foreign currency exchange rate risk. Hedging also exposes us to the credit risk of our counterparty financial institutions.

Increases in our customers' credit risk could result in credit losses and term extensions under existing contracts with customers with credit losses could result in an increase in our operating costs.

Some of our OEM customers have adopted a subcontractor model that requires us to contract directly with companies, such as ODMs, that provide manufacturing and fulfillment services to our OEM customers. Because these subcontractors are generally not as well capitalized as our direct OEM customers, this subcontractor model exposes us to increased credit risks. Our agreements with our OEM customers may not permit us to increase our product prices to alleviate this increased credit risk. Additionally, as we attempt to expand our OEM and distribution channel sales into emerging economies such as Brazil, Russia, India and China, the customers with the most success in these regions may have relatively short operating histories, making it more difficult for us to accurately assess the associated credit risks. Any credit losses we may suffer as a result of these increased risks, or as a result of credit losses from any significant customer, especially in situations where there are term extensions under existing contracts with such customers, would increase our operating costs, which may negatively impact our operating results.

Our operating results fluctuate, sometimes significantly, from period to period due to many factors, which may result in a significant decline in our stock price.

Our quarterly operating results may be subject to significant fluctuations as a result of a number of other factors including:

- weakness in demand for one or more product categories;
- the timing of orders from and shipment of products to major customers, loss of major customers;
- our product mix;
- reductions in the ASPs of our products and lower margins;

- excess output, capacity or inventory, resulting in lower ASPs, financial charges or impairments, or insufficient output, capacity or inventory, resulting in lost revenue opportunities;
- inability to successfully transition to 3D NAND or other technology developments, or other failure to reduce product costs to keep pace with reduction in ASPs;
- manufacturing delays or interruptions;
- delays in design wins or customer qualifications, acceptance by customers of competing products in lieu of our products;
- success of our partnerships and joint ventures, in particular the volume, timing and cost of wafer production at Flash Ventures, and our success in managing the relationships with our strategic partners;
- inability to realize the potential benefits of our acquisitions and the success of our integration efforts;
- ability to penetrate new markets for our storage solutions;
- variations in the cost of and lead times for components for our products, disruptions of our supply chain;
- limited availability of components that we obtain from a single or a limited number of suppliers;
- seasonal and other fluctuations in demand often due to technological advances;
- increase in costs due to warranty claims;
- higher costs as a result of currency exchange rate fluctuations; and
- availability and rates of transportation.

We often ship a high percentage of our total quarterly sales in the third month of the quarter, which makes it difficult for us to forecast our financial results before the end of the quarter. As a result of the above or other factors, our forecast of operating results for the quarter may differ materially from our actual financial results. If our results of operations fail to meet the expectations of analysts or investors, it could cause an immediate and significant decline in our stock price.

We have made and continue to make a number of estimates and assumptions relating to our consolidated financial reporting, and actual results may differ significantly from our estimates and assumptions.

We have made and continue to make a number of estimates and assumptions relating to our consolidated financial reporting. The highly technical nature of our products and the rapidly changing market conditions with which we deal means that actual results may differ significantly from our estimates and assumptions. These changes have impacted our financial results in the past and may continue to do so in the future. Key estimates and assumptions for us include:

- price protection adjustments and other sales promotions and allowances on products sold to retailers, resellers and distributors;
- inventory adjustments for write-down of inventories to lower of cost or market value (net realizable value);
- testing of goodwill and other long-lived assets for impairment;
- accruals for product returns;
- accruals for litigation and other contingencies
- liabilities for unrecognized tax benefits; and
- provisional estimates related to tax reform.

In addition, changes in existing accounting or taxation rules or practices, new accounting pronouncements or taxation rules, or varying interpretations of current accounting pronouncements or taxation practice could have an adverse effect on our results of operations and financial condition.

The market price of our common stock is volatile.

The market price of our common stock has been, and may continue to be, volatile. Factors that may significantly affect the market price of our common stock include the following:

- actual or anticipated fluctuations in our operating results, including those resulting from the seasonality of our business;
- perceptions about our strategic relationships and joint ventures, access to supply of flash-based memory, new technologies and technology transitions;
- announcements of technological innovations by us or our competitors, which may decrease the volume and profitability of sales of our existing products and increase the risk of inventory obsolescence;
- new products introduced by us or our competitors;
- strategic actions by us or competitors, such as acquisitions and restructurings;
- periods of severe pricing pressures due to oversupply or price erosion resulting from competitive pressures or industry consolidation;
- developments with respect to patents or proprietary rights, and any litigation;
- proposed or adopted regulatory changes or developments or anticipated or pending investigations, proceedings or litigation that involve or affect us or our competitors;
- conditions and trends in the hard drive, solid-state storage, flash memory, computer, mobile, data and content management, storage and communication industries;
- contraction in our operating results or growth rates that are lower than our previous high growth-rate periods;
- failure to meet analysts' revenue or earnings estimates or changes in financial estimates or publication of research reports and recommendations by financial analysts relating specifically to us or the storage industry in general;
- announcements relating to dividends and share repurchases; and
- macroeconomic conditions that affect the market generally and, in particular, developments related to market conditions for our industry.

In addition, the sale of substantial amounts of shares of our common stock, or the perception that these sales may occur, could adversely affect the market price of our common stock. Further, the stock market is subject to fluctuations in the stock prices and trading volumes that affect the market prices of the stock of public companies, including us. These broad market fluctuations have adversely affected and may continue to adversely affect the market price of shares of our common stock. For example, expectations concerning general economic conditions may cause the stock market to experience extreme price and volume fluctuations from time to time that particularly affect the stock prices of many high technology companies. These fluctuations may be unrelated to the operating performance of the companies.

Securities class action lawsuits are often brought against companies after periods of volatility in the market price of their securities. A number of such suits have been filed against us in the past, and should any new lawsuits be filed, such matters could result in substantial costs and a diversion of resources and management's attention.

Further, a sustained decline in our stock price or market capitalization are among the factors that may be considered a change in circumstances indicating that the carrying value of our long-lived assets or goodwill may be impaired and, if an impairment review is triggered, could require us to record a significant charge to earnings in our Consolidated Financial Statements.

Our cash balances and investment portfolio are subject to various risks, any of which could adversely impact our financial position.

Given the international footprint of our business, we have both domestic and international cash balances and investments. We maintain an investment portfolio of various holdings, security types, and maturities. These investments are subject to general credit, liquidity, market, political, sovereign and interest rate risks, which may be exacerbated by unusual events that affect global financial markets. A material part of our investment portfolio consists of investment grade corporate securities, bank deposits, asset backed securities and U.S. government and agency securities. If global credit and equity markets experience prolonged periods of decline, or if there is a downgrade of the U.S. government credit rating due to an actual or threatened default on government debt, our investment portfolio may be adversely impacted and we could determine that our investments may experience an other-than-temporary decline in fair value, requiring impairment charges that could adversely affect our financial results. A failure of any of these financial institutions in which deposits exceed Federal Deposit Insurance Corporation (FDIC) limits could also have an adverse impact on our financial position.

In addition, if we are unable to generate sufficient cash flows from operations to repay our indebtedness, fund acquisitions, pay dividends, or repurchase shares of our common stock, we may choose or be required to increase our borrowings, if available, or to repatriate funds to the U.S. at an additional tax cost. We must comply with regulations regarding the conversion and distribution of funds earned in the local currencies of various countries. If we cannot comply with these or other applicable regulations, we may face increased difficulties in using cash generated in these countries.

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

Recent Sales of Unregistered Securities

There were no unregistered sales of equity securities during the quarter ended December 28, 2018.

Issuer Purchases of Equity Securities

There were no repurchases of shares of our common stock during the quarter ended December 28, 2018.

Item 3. *Defaults Upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

Item 5. *Other Information*

None.

Item 6. *Exhibits*

The exhibits listed in the Exhibit Index below are filed with, or incorporated by reference in, this Quarterly Report on Form 10-Q, as specified in the Exhibit List, from exhibits previously filed with the Securities and Exchange Commission. Certain agreements listed in the Exhibit Index that we have filed or incorporated by reference may contain representations and warranties by us or our subsidiaries. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in our public disclosures, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe the actual state of affairs at the date hereof and should not be relied upon.

EXHIBIT INDEX

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated as of October 21, 2015, among Western Digital Corporation, Schrader Acquisition Corporation and SanDisk Corporation (Filed as Exhibit 2.1 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on October 26, 2015)±
3.1	Amended and Restated Certificate of Incorporation of Western Digital Corporation, as amended to date (Filed as Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 8, 2006)
3.2	Amended and Restated By-Laws of Western Digital Corporation, as amended effective as of May 2, 2018 (Filed as Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on May 7, 2018)
10.1	Western Digital Corporation Amended and Restated 2017 Performance Incentive Plan (Filed as Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on November 7, 2018)*
10.2	Western Digital Corporation Amended and Restated 2005 Employee Stock Purchase Plan (Filed as Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on November 7, 2018)*
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002†
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002†
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**
101.INS	XBRL Instance Document†
101.SCH	XBRL Taxonomy Extension Schema Document†
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document†
101.LAB	XBRL Taxonomy Extension Label Linkbase Document†
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document†
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document†

† Filed with this report.

* Management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to applicable rules of the Securities and Exchange Commission.

** Furnished with this report.

± Certain schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish supplemental copies of any of the omitted schedules upon request by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

WESTERN DIGITAL CORPORATION

By: /s/ MARK P. LONG

Mark P. Long

President WD Capital, Chief Strategy Officer and Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

Dated: February 4, 2019

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Stephen D. Milligan, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Western Digital Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ STEPHEN D. MILLIGAN

Stephen D. Milligan
Chief Executive Officer

Dated: February 4, 2019

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark P. Long, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Western Digital Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ MARK P. LONG

Mark P. Long

President WD Capital, Chief Strategy Officer and Chief Financial Officer

Dated: February 4, 2019

The following certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350 and in accordance with SEC Release No. 33-8238. This certification shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that Western Digital Corporation specifically incorporates it by reference.

Certification of Chief Executive Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Western Digital Corporation, a Delaware corporation (the “Company”), hereby certifies, to his knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 28, 2018 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ STEPHEN D. MILLIGAN

Stephen D. Milligan
Chief Executive Officer

Dated: February 4, 2019

The following certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350 and in accordance with SEC Release No. 33-8238. This certification shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that Western Digital Corporation specifically incorporates it by reference.

Certification of Chief Financial Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Western Digital Corporation, a Delaware corporation (the “Company”), hereby certifies, to his knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 28, 2018 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MARK P. LONG

Mark P. Long

President WD Capital, Chief Strategy Officer and Chief Financial Officer

Dated: February 4, 2019