

The background of the slide features a stylized architectural rendering of a modern building with a glass facade and a series of vertical, rectangular columns that create a sense of depth and perspective. The color palette is primarily light blue and white, with a subtle gradient. The Western Digital logo is positioned in the top left corner.

**Western Digital.**

# Fourth Quarter of Fiscal 2019 Earnings Presentation

July 31, 2019

*(Updated reconciliation table on slide 14 on August 8, 2019, all other reported data unchanged)*

# Forward-Looking Statements Safe Harbor | Disclaimers

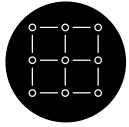
This presentation contains forward-looking statements that involve risks and uncertainties, including, but not limited to, statements regarding our product and technology portfolio; market positioning; business strategies and growth opportunities; our expected future financial performance; cost and expense reduction plans; and market, hard drive industry and flash industry trends. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by, which such performance or results will be achieved, if at all. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements.

Key risks and uncertainties include volatility in global economic conditions; business conditions and growth in the storage ecosystem; impact of restructuring activities and cost saving initiatives; impact of competitive products and pricing; market acceptance and cost of commodity materials and specialized product components; actions by competitors; unexpected advances in competing technologies; our development and introduction of products based on new technologies and expansion into new data storage markets; risks associated with acquisitions, mergers and joint ventures; difficulties or delays in manufacturing; the outcome of legal proceedings; and other risks and uncertainties listed in the company's filings with the Securities and Exchange Commission (the "SEC") and available on the SEC's website at [www.sec.gov](http://www.sec.gov), including our most recently filed periodic report, to which your attention is directed. We do not undertake any obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as required by law.

This presentation includes references to non-GAAP financial measures. Reconciliations of the differences between the non-GAAP measures provided in this presentation to the comparable GAAP financial measures are included in the appendix and in the Investor Relations section of our website. We have not fully reconciled our non-GAAP financial measure guidance to the most directly comparable GAAP measures because material items that impact these measures are not in our control and/or cannot be reasonably predicted. Accordingly, a full reconciliation of the non-GAAP financial measure guidance to the corresponding GAAP measures is not available without unreasonable effort.



# Executive Summary



## STRONG PRODUCT PORTFOLIO

- Leadership in capacity enterprise, 3D flash and branded retail
- NVMe SSD platforms: significant gains in client and growing momentum in enterprise
- Product portfolio strongest in our history: focusing on higher growth, higher margin opportunities



## EXCELLENCE IN EXECUTION



### FLASH

- Internally developed enterprise NVMe SSD commencing revenue ramp at major hyperscale and OEM customers
- Leading the industry's transition to BiCS4 (96-layer 3D flash) technology
- BiCS4: Supply bit cross over exiting Sept-19 quarter. Expect to ship in each of the product lines before the end of CY 2019.



### HDD

- Capacity enterprise: continue to lead in areal density and capacity points
- 14TB: qualified at virtually all hyperscale and OEM customers
- On track to deliver 16TB and 18TB energy assisted recording drives in CY 2019



## EXECUTING WELL TO COST AND EXPENSE REDUCTION PLANS

- On track to achieve projected non-GAAP operating expense reductions by September 2019 quarter and non-GAAP cost reductions exiting the December 2019 quarter

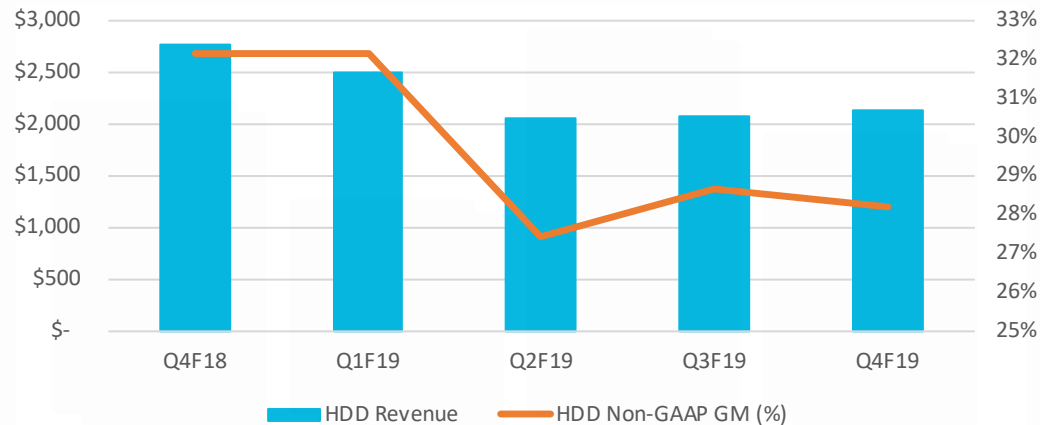


## WELL POSITIONED TO EMERGE STRONGER

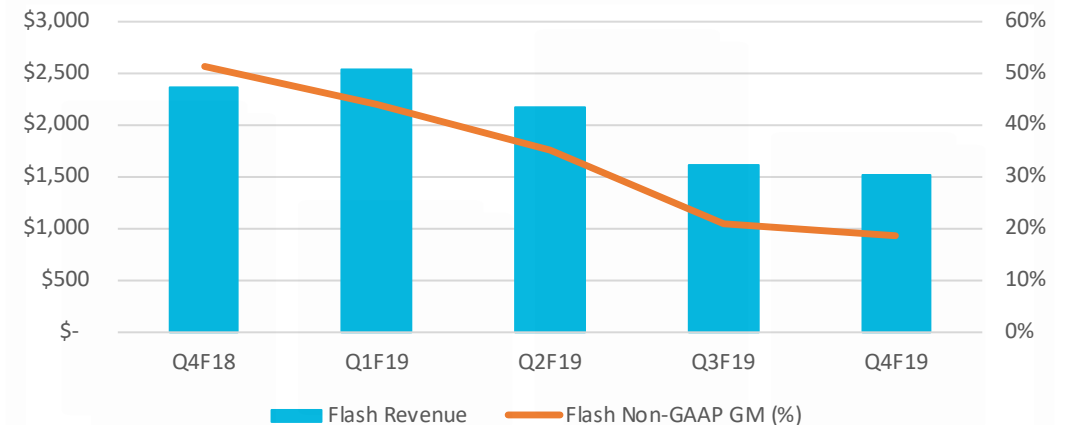
- We see a normalizing flash supply and inventory environment
- We believe that the flash market has reached a cyclical trough

# Hard Drive, Flash Results and Outlook (\$ millions)

## HDD Revenue and Non-GAAP Gross Margin (%)



## Flash Revenue and Non-GAAP Gross Margin (%)



### HDD

#### Q4F19 Results

- Total exabytes: +14% q/q
- Average unit capacity: +14% q/q
- Capacity enterprise exabyte shipments grew mid-single digits y/y for 1H of CY 2019

#### Outlook

- Capacity enterprise market exabyte growth expectations:
  - CY 2019: Meaningfully exceed 30% y/y growth

### Flash

#### Q4F19 Results

- Bit shipments: -1% q/q
- Average unit capacity:
  - Retail flash: +36% y/y
  - Non-retail client SSD: +78% y/y

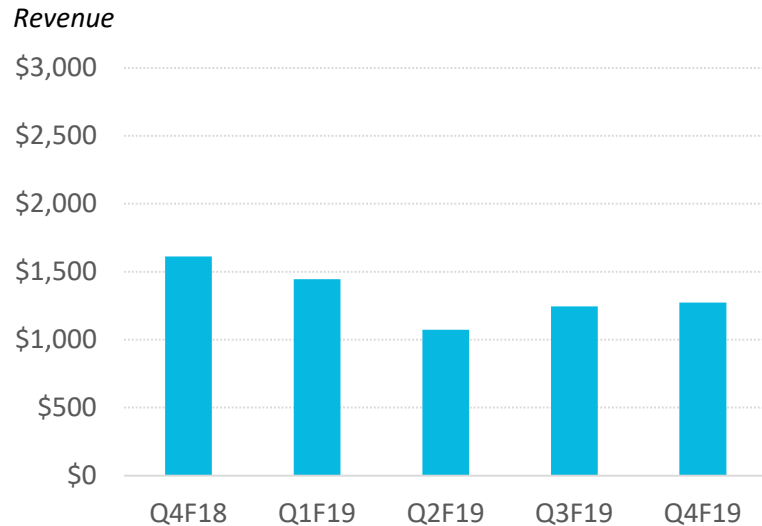
#### Outlook

- Industry bit supply expectations:
  - CY 2019: y/y growth in low 20% range

For reconciliations of GAAP to Non-GAAP financial measures, see the Appendix

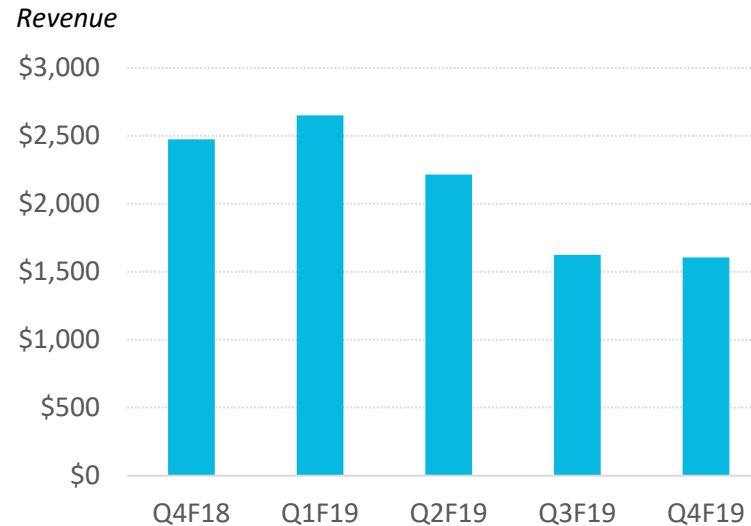
# End Market Trends (\$ millions)

## Data Center Devices & Solutions



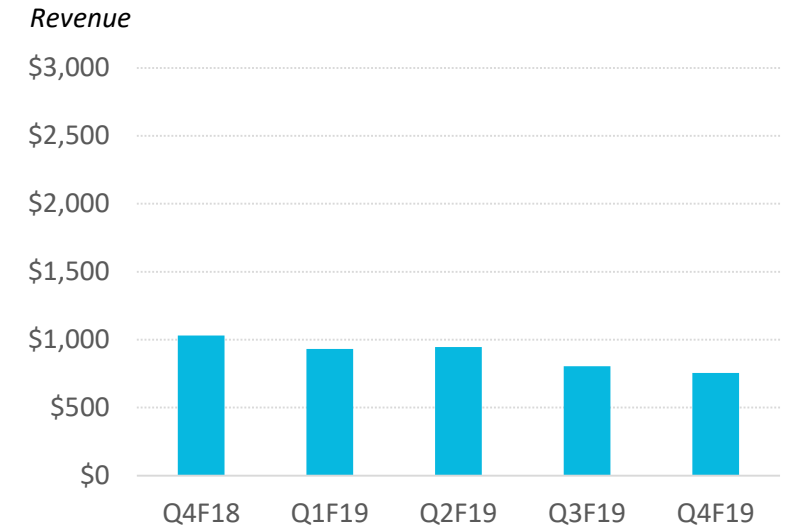
- Strong ramp of high capacity enterprise drives such as 14TB
- Expanding market presence with air-based mid-range capacity enterprise drives
- Initial revenue ramp of internally developed NVMe enterprise SSDs to hyperscale and OEM customers

## Client Devices



- Accelerating adoption of client SSDs for desktops and notebooks
- Significant traction for internally developed client NVMe based platform
- Decline in mobile embedded revenue
- Continued impact from flash pricing

## Client Solutions



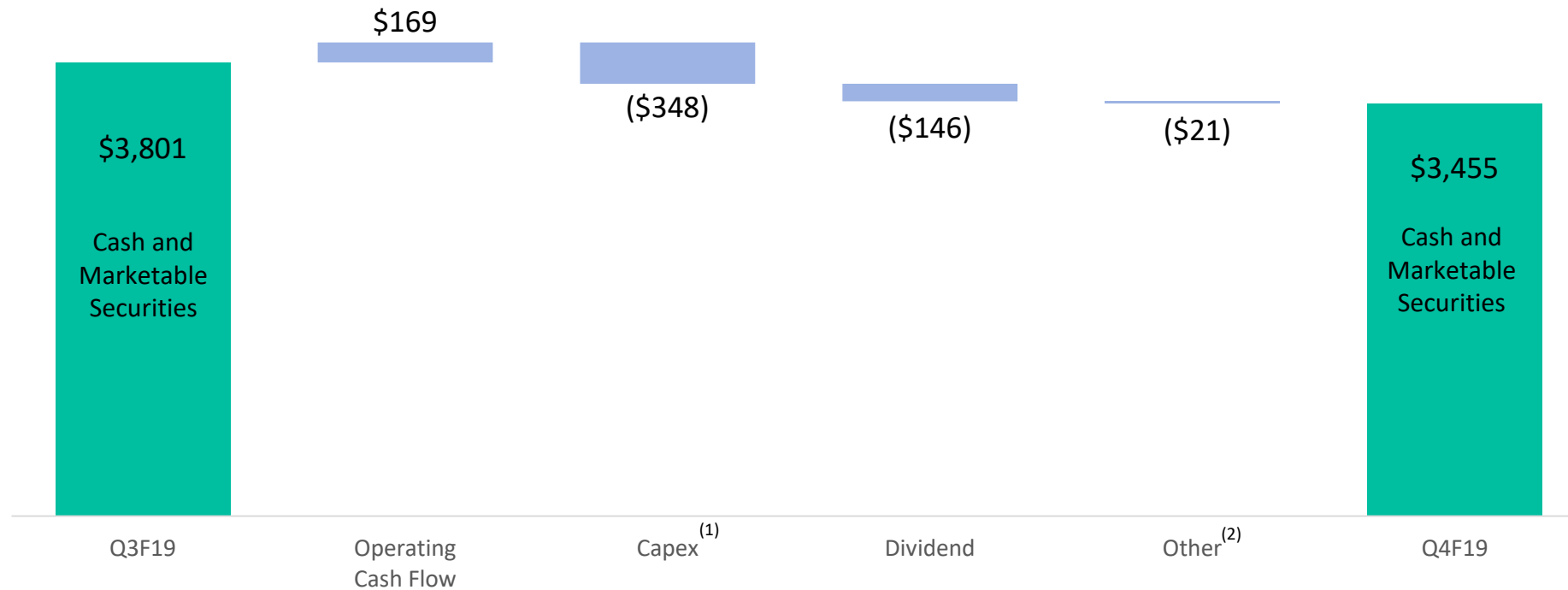
- Maintained position as premium brand
- Growing presence in external SSDs
- Continued growth in average unit capacities for flash

# Non-GAAP Financial Results

\$ Millions, except EPS	Q4F19	Q3F19	Q4F18	Q/Q	Y/Y
Revenue	\$3,634	\$3,674	\$5,117	(\$40)	(\$1,483)
Gross Margin %*	24.2%	25.3%*	41.0%	~(100) BPS	~(1700) BPS
Operating Expenses	722	742	820	(\$20)	(\$98)
Operating Income	158	186	1,277	(\$28)	(\$1,119)
Interest and Other Expense, net	87	88	101	(\$1)	(\$14)
EPS*	\$0.17	\$0.17*	\$3.61	~unchanged	(\$3.44)
Operating Cash Flow	\$169	\$204	\$863	(\$35)	(\$694)
Free Cash Flow	(\$179)	(\$110)	\$638	(\$69)	(\$817)

\*Includes the impact associated with lower of cost or market inventory reserves of a 300 basis point reduction to gross margin and \$0.37 reduction to non-GAAP EPS.  
For reconciliations of GAAP to Non-GAAP financial measures, see the Appendix and Quarterly Fact Sheet.

# Cash Flow Walk (\$ millions)



- Long-term capital investment framework: 6% to 8% of total revenue
- Strong liquidity position: \$5.7 billion, including \$2.25 billion undrawn revolver
- Significant headroom with debt covenants

(1) Capex includes purchases of property, plant and equipment, net, Proceeds from the sale of fixed assets, and the activity related to Flash Ventures, net

(2) Other primarily consists of employee stock plans, net, and repayment of debt



# Quarterly Fact Sheet

In millions, except Average Selling Price (ASP), percentages, and working capital-related metrics

	THREE MONTHS ENDED				
	6/29/18	9/28/18	12/28/18	3/29/19	6/28/19
<b>REVENUE</b>					
Client Devices <sup>1</sup>	\$2,474	\$2,650	\$2,214	\$1,625	\$1,606
Client Solutions <sup>1</sup>	1,031	932	945	804	755
Data Center Devices & Solutions <sup>1</sup>	<u>1,612</u>	<u>1,446</u>	<u>1,074</u>	<u>1,245</u>	<u>1,273</u>
<b>Total Revenue</b>	<b>\$5,117</b>	<b>\$5,028</b>	<b>\$4,233</b>	<b>\$3,674</b>	<b>\$3,634</b>
<b>EXABYTE METRICS (Q/Q Changes)</b>					
HDD Exabytes Sold <sup>2</sup>	6%	(6%)	(17%)	13%	14%
Flash Exabytes Sold <sup>2</sup>	9%	28%	5%	(5%)	(1%)
Total Exabytes Sold <sup>2</sup>	6%	(3%)	(15%)	11%	12%
<b>TECHNOLOGY</b>					
HDD Revenue	\$2,754	\$2,494	\$2,060	\$2,064	\$2,128
Flash Revenue	\$2,363	\$2,534	\$2,173	\$1,610	\$1,506
HDD Non-GAAP Gross Margin <sup>3</sup>	32%	32%	27%	29%	28%
Flash Non-GAAP Gross Margin <sup>3</sup>	51%	44%	35%	21%	19%
<b>Total Non-GAAP Gross Margin<sup>3</sup></b>	<b>41.0%</b>	<b>38.0%</b>	<b>31.3%</b>	<b>25.3%</b>	<b>24.2%</b>
<b>CASH</b>					
Cash and Cash Equivalents	\$5,005	\$4,646	\$4,013	\$3,682	\$3,455
Available-for-Sale (AFS) Securities	116	116	117	119	-
<b>Total Cash, Cash Equivalents, and AFS Securities</b>	<b>\$5,121</b>	<b>\$4,762</b>	<b>\$4,130</b>	<b>\$3,801</b>	<b>\$3,455</b>

	THREE MONTHS ENDED				
	6/29/18	9/28/18	12/28/18	3/29/19	6/28/19
<b>CASH FLOWS</b>					
Cash Flows provided by Operating Activities	\$863	\$705	\$469	\$204	\$169
Purchases of Property, Plant and Equipment, net	(190)	(277)	(220)	(222)	(38)
Activity Related to Flash Ventures, net	(35)	29	(225)	(92)	(310)
<b>Free Cash Flow<sup>4</sup></b>	<b>\$638</b>	<b>\$457</b>	<b>\$24</b>	<b>(\$110)</b>	<b>(\$179)</b>
<b>WORKING CAPITAL RELATED</b>					
Days Sales Outstanding	39	40	37	30	30
Days Inventory Outstanding	82	84	98	101	94
Days Payables Outstanding	(70)	(64)	(64)	(55)	(54)
<b>Cash Conversion Cycle</b>	<b>51</b>	<b>60</b>	<b>71</b>	<b>76</b>	<b>70</b>
<b>FLASH METRICS</b>					
Q/Q Change in ASP/Gigabytes <sup>2</sup>	(8%)	(16%)	(18%)	(23%)	(6%)
<b>HDD METRICS</b>					
Client Compute Units <sup>5</sup>	17.8	16.3	14.0	12.9	12.3
Non-Compute Units <sup>6</sup>	13.7	11.2	11.1	9.3	9.2
Data Center Units <sup>7</sup>	<u>7.5</u>	<u>6.6</u>	<u>5.1</u>	<u>5.6</u>	<u>6.2</u>
<b>Total HDD Units<sup>8</sup></b>	<b>39.0</b>	<b>34.1</b>	<b>30.2</b>	<b>27.8</b>	<b>27.7</b>
<b>HDD ASP<sup>9</sup></b>	<b>\$70</b>	<b>\$72</b>	<b>\$67</b>	<b>\$73</b>	<b>\$75</b>



# Quarterly Fact Sheet Footnotes

## FORMULAS

**Days Sales Outstanding (DSO)** = Accounts Receivable / (Revenue / # of days in quarter)

**Days Inventory Outstanding (DIO)** = Inventories / (Cost of Revenue / # of days in quarter)

**Days Payables Outstanding (DPO)** = Accounts Payable (including Accounts Payable to Related Parties) / (Cost of Revenue / # of days in quarter)

**Cash Conversion Cycle** = DSO + DIO – DPO

## FOOTNOTES

- ❶ Client Devices is comprised of notebook and desktop HDD, consumer electronics HDD, client SSD, embedded, wafer sales and licensing and royalties. Client Solutions is comprised of branded HDD, branded flash, removables and licensing and royalties. Data Center Devices and Solutions is comprised of enterprise HDD, enterprise SSD, data center software, data center solutions and licensing and royalties.
- ❷ Excludes licensing, royalties, and non-memory products.
- ❸ Refer to the GAAP to non-GAAP reconciliation slides within the Appendix for further details.
- ❹ Free cash flow is a non-GAAP financial measure defined as cash flows provided by operating activities less purchases of property, plant and equipment, net of proceeds from sales of property, plant and equipment, and the activity related to Flash Ventures, net. We consider free cash flow to be useful as an indicator of our overall liquidity, as the amount of free cash flow generated in any period is representative of cash that is available for strategic opportunities or other business purposes including, among others, investing in the company's business, making strategic acquisitions, strengthening the balance sheet, repaying debt, paying dividends and repurchasing stock. Free cash flow is not an alternative for measures prepared in accordance with GAAP and may be different from non-GAAP free cash flow measures used by other companies.
- ❺ Client compute products consist primarily of desktop and notebook HDDs, excluding those sold through retail channels.
- ❻ Non-compute products consist of retail channel and consumer electronics HDDs.
- ❼ Data center products consist of enterprise HDDs (high-capacity and performance) and enterprise systems.
- ❽ HDD Unit volume excludes data storage systems and media.
- ❾ HDD ASP is calculated by dividing HDD revenue by HDD units. Data storage systems are excluded from this calculation, as data storage systems ASP is measured on a per system basis rather than a per drive basis.

# Debt Tranches and Interest Rates

Debt	Base Rate	Maturity	Principal Balance Outstanding as of 6/28/2019 (in millions)	Applicable Rates <sup>A</sup>
Convertible Debt Due 2020 <sup>B</sup>	0.500%	October 15, 2020	35	0.500%
Revolver Drawn <sup>C, D</sup>	L+150	February 27, 2023	0	3.902%
Term Loan A-1 <sup>D</sup>	L+150	February 27, 2023	4,834	3.821% <sup>E</sup>
Term Loan B-4 <sup>D</sup>	L+175	April 29, 2023	2,425	4.152%
Convertible Debt Due 2024 <sup>F</sup>	1.500%	February 1, 2024	1,100	1.500%
Sr. Unsecured Notes Due 2026 <sup>G</sup>	4.750%	February 15, 2026	2,300	4.750%
<b>TOTAL</b>			<b>\$10,694</b>	<b>3.846%<sup>H</sup></b>

A. All-in applicable rates as of June 28, 2019. Applicable spread for Term Loan A-1 and Revolver over LIBOR based on credit ratings as of June 28, 2019.

B. Debt assumed in connection with the acquisition of SanDisk Corporation in May 2016.

C. Revolver capacity: \$2.25 billion, none of which was drawn as of June 28, 2019.

D. Term Loan A-1, Term Loan B-4, and Revolver have a LIBOR floor of 0bps.

E. Reflects impact of the interest rate swaps that effectively fix LIBOR on \$2 billion of floating-rate debt at 2.21% through May 2020 and 2.60% through February 2023.

F. Initial conversion price of \$121.91 per share. Notes are callable beginning February 5, 2021.

G. Notes are callable beginning November 15, 2025.

H. Weighted average interest rate, including impact of interest rate swaps, based on principal balances outstanding as of June 28, 2019.

# Investment Thesis

- Exposure to powerful secular trends in data growth and its increasing value
- Leverage core HDD and flash IP and technologies to address growing opportunities in storage industry
- Full portfolio of storage solutions for OEM, Hyperscale, Commercial Channel, and Retail customers
- Efficient flash R&D and manufacturing partnerships
- Focus on financial discipline
- Key corporate values include transparent engagement with stakeholders

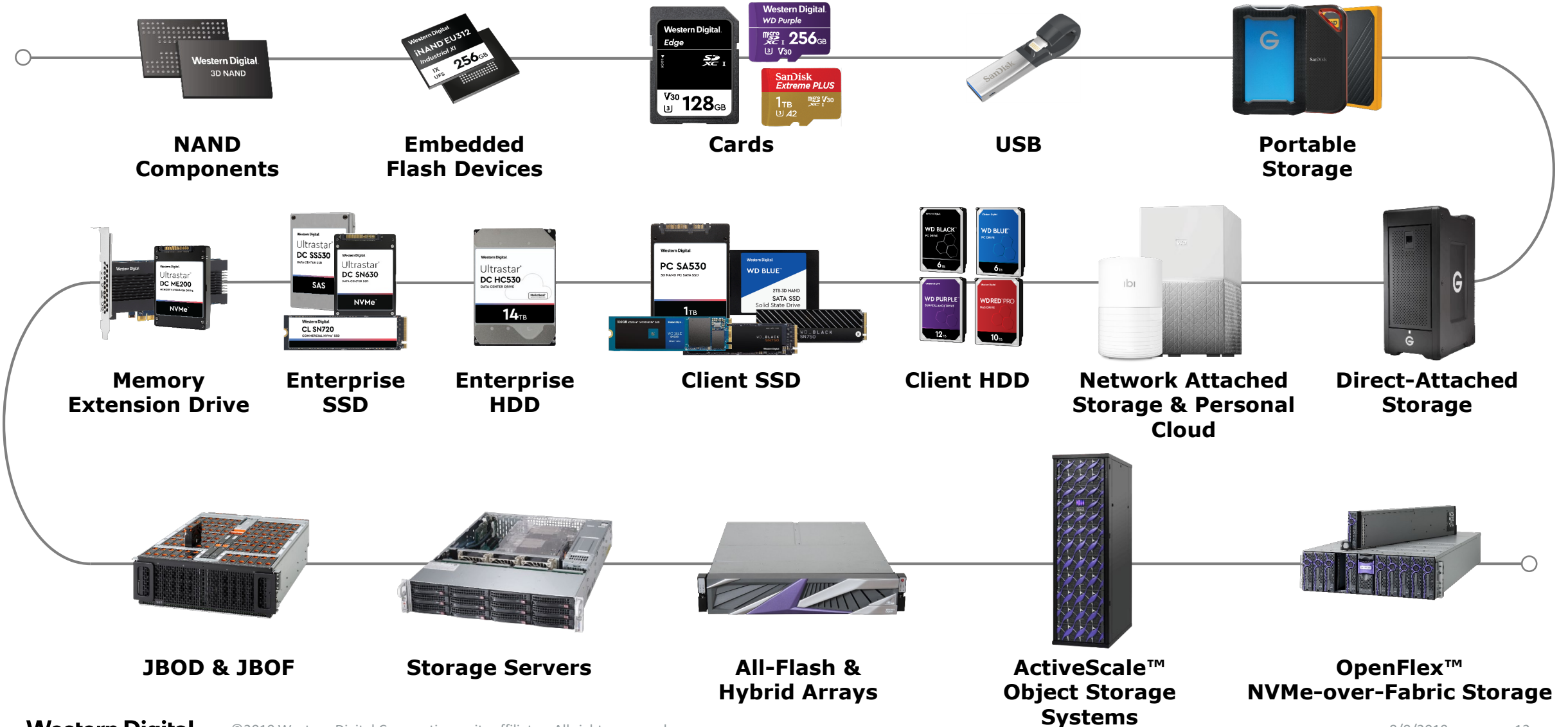
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**Global Data Infrastructure Leader with Diversification,  
Scale, and Growth Potential**

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# Leading Portfolio Breadth and Depth

Solutions to capture, preserve, access and transform data







**Western Digital®**

# Appendix

# GAAP to Non-GAAP Reconciliation

In millions; unaudited

	THREE MONTHS ENDED		
	6/29/2018	3/29/2019	6/28/2019
<b>GAAP COST OF REVENUE</b>	<b>\$3,265</b>	<b>\$3,095</b>	<b>\$3,169</b>
Amortization of acquired intangible assets	(234)	(188)	(166)
Stock-based compensation expense	(12)	(13)	(11)
Charges related to cost saving initiatives	1	-	(4)
Manufacturing underutilization charges	-	(148)	(67)
Power outage charges	-	-	(145)
Other	-	-	(22)
<b>NON-GAAP COST OF REVENUE</b>	<b>\$3,020</b>	<b>\$2,746</b>	<b>\$2,754</b>
<b>GAAP GROSS PROFIT</b>	<b>\$1,852</b>	<b>\$579</b>	<b>\$465</b>
Amortization of acquired intangible assets	234	188	166
Stock-based compensation expense	12	13	11
Charges related to cost saving initiatives	(1)	-	4
Manufacturing underutilization charges	-	148	67
Power outage charges	-	-	145
Other	-	-	22
<b>NON-GAAP GROSS PROFIT</b>	<b>\$2,097</b>	<b>\$928</b>	<b>\$880</b>
<b>GAAP OPERATING EXPENSES</b>	<b>\$1,009</b>	<b>\$973</b>	<b>\$846</b>
Amortization of acquired intangible assets	(41)	(41)	(41)
Stock-based compensation expense	(66)	(71)	(53)
Employee termination, asset impairment and other charges	(80)	(76)	(24)
Acquisition-related charges	(1)	-	-
Charges related to cost saving initiatives	(1)	(3)	(3)
Other	-	(40)	(3)
<b>NON-GAAP OPERATING EXPENSES</b>	<b>\$820</b>	<b>\$742</b>	<b>\$722</b>
<b>GAAP OPERATING INCOME (LOSS)</b>	<b>\$843</b>	<b>(\$394)</b>	<b>(\$381)</b>
Cost of revenue adjustments	245	349	415
Operating expense adjustments	189	231	124
<b>NON-GAAP OPERATING INCOME</b>	<b>\$1,277</b>	<b>\$186</b>	<b>\$158</b>
<b>GAAP INTEREST AND OTHER EXPENSE, NET</b>	<b>(\$114)</b>	<b>(\$83)</b>	<b>(\$93)</b>
Convertible debt activity	7	7	7
Debt extinguishment costs	3	-	-
Other	3	(12)	(1)
<b>NON-GAAP INTEREST AND OTHER EXPENSE, NET</b>	<b>(\$101)</b>	<b>(\$88)</b>	<b>(\$87)</b>
<b>GAAP INCOME TAX EXPENSE (BENEFIT)</b>	<b>(\$27)</b>	<b>\$104</b>	<b>(\$277)</b>
Income tax adjustments	94	(55)	298
<b>NON-GAAP INCOME TAX EXPENSE</b>	<b>\$67</b>	<b>\$49</b>	<b>\$21</b>

# GAAP to Non-GAAP Reconciliation

In millions, except EPS and percentages; unaudited

	THREE MONTHS ENDED				
	6/29/2018	3/29/2019	6/28/2019		
<b>GAAP NET INCOME (LOSS)</b>	<b>\$756</b>	<b>(\$581)</b>	<b>(\$197)</b>		
Amortization of acquired intangible assets	275	229	207		
Stock-based compensation expense	78	84	64		
Employee termination, asset impairment and other charges	80	76	24		
Acquisition-related charges	1	-	-		
Charges related to cost saving initiatives	-	3	7		
Manufacturing underutilization charges	-	148	67		
Power outage charges	-	-	145		
Convertible debt activity	7	7	7		
Debt extinguishment costs	3	-	-		
Other	3	28	24		
Income tax adjustments	(94)	55	(298)		
<b>NON-GAAP NET INCOME</b>	<b>\$1,109</b>	<b>\$49</b>	<b>\$50</b>		
<b>DILUTED INCOME (LOSS) PER COMMON SHARE</b>					
GAAP	\$2.46	(\$1.99)	(\$0.67)		
Non-GAAP	\$3.61	\$0.17	\$0.17		
<b>DILUTED WEIGHTED AVERAGE SHARES OUTSTANDING</b>					
GAAP	307	292	294		
Non-GAAP	307	294	295		
	THREE MONTHS ENDED*				
	6/29/2018	9/28/2018	12/28/2018	3/29/2019	6/28/2019
<b>GAAP GROSS MARGIN</b>	<b>36.2%</b>	<b>33.1%</b>	<b>24.7%</b>	<b>15.8%</b>	<b>12.8%</b>
Amortization of acquired intangible assets	4.6%	4.7%	5.1%	5.1%	4.6%
Stock-based compensation expense	0.2%	0.2%	0.3%	0.4%	0.3%
Charges related to cost saving initiatives	0.0%	0.0%	0.1%	-	0.1%
Manufacturing underutilization charges	0.0%	0.0%	1.1%	4.0%	1.8%
Power Outage charges	0.0%	0.0%	0.0%	0.0%	4.0%
Other Charges	0.0%	0.0%	0.0%	0.0%	0.6%
<b>NON-GAAP GROSS MARGIN</b>	<b>41.0%</b>	<b>38.0%</b>	<b>31.3%</b>	<b>25.3%</b>	<b>24.2%</b>
HDD non-GAAP gross margin	32%	32%	27%	29%	28%
Flash non-GAAP gross margin	51%	44%	35%	21%	19%
<b>NON-GAAP GROSS MARGIN</b>	<b>41.0%</b>	<b>38.0%</b>	<b>31.3%</b>	<b>25.3%</b>	<b>24.2%</b>

\*GAAP gross margin is calculated by dividing GAAP gross profit by revenue. Non-GAAP gross margin is calculated by dividing non-GAAP gross profit by revenue. HDD non-GAAP gross margin is calculated by dividing HDD non-GAAP gross profit by HDD revenue. Flash non-GAAP gross margin is calculated by dividing Flash non-GAAP gross profit by Flash revenue.



# Footnotes for GAAP to Non-GAAP Reconciliation

This presentation contains the following financial measures that are not in accordance with U.S. generally accepted accounting principles (“GAAP”): non-GAAP cost of revenue; non-GAAP gross profit; non-GAAP operating expenses; non-GAAP operating income; non-GAAP interest and other expense, net; non-GAAP income tax expense; non-GAAP net income; non-GAAP diluted income per common share; and non-GAAP gross margin (“Non-GAAP measures”). These Non-GAAP measures are not in accordance with, or an alternative for, measures prepared in accordance with GAAP and may be different from Non-GAAP measures used by other companies. The company believes the presentation of these Non-GAAP measures, when shown in conjunction with the corresponding GAAP measures, provides useful information to investors for measuring the company’s earnings performance and comparing it against prior periods. Specifically, the company believes these Non-GAAP measures provide useful information to both management and investors as they exclude certain expenses, gains and losses that the company believes are not indicative of its core operating results or because they are consistent with the financial models and estimates published by many analysts who follow the company and its peers. As discussed further below, these Non-GAAP measures exclude the amortization of acquired intangible assets, stock-based compensation expense, employee termination, asset impairment and other charges, acquisition-related charges, charges related to cost saving initiatives, manufacturing underutilization charges, power outage charges, convertible debt activity, debt extinguishment costs, other adjustments, and income tax adjustments, and the company believes these measures along with the related reconciliations to the GAAP measures provide additional detail and comparability for assessing the company’s results. These Non-GAAP measures are some of the primary indicators management uses for assessing the company’s performance and planning and forecasting future periods. These measures should be considered in addition to results prepared in accordance with GAAP, but should not be considered a substitute for, or superior to, GAAP results. As described above, the company excludes the following items from its Non-GAAP measures:

**Amortization of acquired intangible assets.** The company incurs expenses from the amortization of acquired intangible assets over their economic lives. Such charges are significantly impacted by the timing and magnitude of the company’s acquisitions and any related impairment charges.

**Stock-based compensation expense.** Because of the variety of equity awards used by companies, the varying methodologies for determining stock-based compensation expense, the subjective assumptions involved in those determinations, and the volatility in valuations that can be driven by market conditions outside the company’s control, the company believes excluding stock-based compensation expense enhances the ability of management and investors to understand and assess the underlying performance of its business over time and compare it against the company’s peers, a majority of whom also exclude stock-based compensation from their non-GAAP results.

**Employee termination, asset impairment and other charges.** From time-to-time, in order to realign the company’s operations with anticipated market demand or to achieve cost synergies from the integration of acquisitions, the company may terminate employees and/or restructure its operations. From time-to-time, the company may also incur charges from the impairment of intangible assets and other long-lived assets. These charges (including any reversals of charges recorded in prior periods) are inconsistent in amount and frequency, and the company believes are not indicative of the underlying performance of its business.

**Acquisition-related charges.** In connection with the company’s business combinations, the company incurs expenses which it would not have otherwise incurred as part of its business operations. These expenses include third-party professional service and legal fees, third-party integration services, severance costs, non-cash adjustments to the fair value of acquired inventory, contract termination costs, and retention bonuses. The company may also experience other accounting impacts in connection with these transactions. These charges and impacts are related to acquisitions, are inconsistent in amount and frequency, and the company believes are not indicative of the underlying performance of its business.

**Charges related to cost saving initiatives.** In connection with the transformation of the company’s business combinations, the company has incurred charges related to cost saving initiatives which do not qualify for special accounting treatment as exit or disposal activities. These charges, which the company believes are not indicative of the underlying performance of its business, primarily relate to costs associated with rationalizing the company’s channel partners or vendors, transforming the company’s information systems infrastructure, integrating the company’s product roadmap, and accelerated depreciation of assets.

**Manufacturing underutilization charges.** In response to flash business conditions, the company reduced its wafer starts at its flash-based memory manufacturing facilities operated through its strategic partnership with Toshiba Memory Corporation (TMC). The temporary abnormal reduction in output resulted in flash manufacturing underutilization charges which are expensed as incurred. These charges are inconsistent in amount and frequency, and the company believes these charges are not part of the ongoing operation of its business.

**Power outage charges.** In June 2019, an unexpected power outage incident occurred at the flash-based memory manufacturing facilities operated through the company’s strategic partnership with TMC in Yokkaichi, Japan. The power outage incident resulted in the write-off of damaged inventory and unabsorbed manufacturing overhead costs which are expensed as incurred. These charges are inconsistent in amount and frequency, and the company believes these charges are not part of the ongoing production operation of its business.

**Convertible debt activity.** The company excludes non-cash economic interest expense associated with its convertible notes. These charges do not reflect the company’s operating results, and the company believes are not indicative of the underlying performance of its business.

**Debt extinguishment costs.** From time-to-time, the company replaces its existing debt with new financing at more favorable interest rates or utilizes available capital to settle debt early, both of which generate interest savings in future periods. The company incurs debt extinguishment charges consisting of the costs to call the existing debt and/or the write-off of any related unamortized debt issuance costs. These charges do not reflect the company’s operating results, and the company believes are not indicative of the underlying performance of its business.

**Other adjustments.** From time-to-time, the company sells or impairs investments or other assets which are not considered necessary to its business operations, or incurs other charges or gains that the company believes are not a part of the ongoing operation of its business. The resulting expense or benefit is inconsistent in amount and frequency.

**Income tax adjustments.** Income tax adjustments include the difference between income taxes based on a forecasted annual non-GAAP tax rate and a forecasted annual GAAP tax rate as a result of the timing of certain non-GAAP pre-tax adjustments. The income tax adjustments include the company’s final adjustments for the tax effects of the Tax Cuts and Jobs Act allowed within the one-year measurement period that ended on December 22, 2018, as well as estimates related to the current status of the rules and regulations governing the transition to the Tax Cuts and Jobs Act. These adjustments are excluded because they are infrequent and the company believes that they are not indicative of the underlying performance of its business.