Western Digital_®

2022 Annual Report

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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	FORM 10-K	
ANNUAL REPORT PURSUAN	(Mark One) NT TO SECTION 13 OR 15(d) OF THE	SECURITIES EXCHANGE ACT OF 19
	For the fiscal year ended July 1, 2	2022
	Or	
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	For the transition period from	to
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There were 314,492,	541 shares of common stock, p	ar value \$0.01 per share, outsta	nding as of the close of business	on August 11, 2022.
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Part III incorporates by reference certain information from the registrant's definitive proxy statement (the "Proxy Statement") for the 2022 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of the 2022 fiscal year. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as part hereof.

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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.

In this Annual Report on Form 10-K, we make references to our website at www.westerndigital.com. References to our website through this Form 10-K are provided for convenience only and the content on our website does not constitute a part of, and shall not be deemed incorporated by reference into, this Annual Report on Form 10-K.

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.

Western Digital, the Western Digital logo, SanDisk and WD are registered trademarks or trademarks of Western Digital or its affiliates in the U.S. and/or other countries. All other trademarks, registered trademarks and/or service marks, indicated or otherwise, are the property of their respective owners.

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:

- our market position and portfolio synergies;
- our product plans and business strategies, including our ongoing review of strategic alternatives;
- consumer trends and market conditions, market opportunities and our market position;
- expectations regarding the global macroeconomic environment, including with respect to economic volatility and uncertainty, declines in consumer confidence and economic growth, customers reducing their inventories, rising interest rates and fuel prices, inflation, the ongoing conflict in Ukraine and the effects of the COVID-19 pandemic;
- expectations regarding supply chain conditions and constraints;
- expectations regarding demand trends and market conditions for our products and expected future financial performance;
- expectations regarding our product momentum and product development and technology plans;
- expectations regarding capital expenditure plans and investments;
- expectations regarding our Flash Ventures joint venture with Kioxia Corporation ("Kioxia"), the flash industry and our flash wafer output plans and sources of funding for related expenditures;
- expectations regarding our effective tax rate and our unrecognized tax benefits; and
- our beliefs regarding our capital allocation plans and the sufficiency of our available liquidity to meet our working capital, debt and capital expenditure needs.

These forward-looking statements are based on management's current expectations, represent the most current information available to the Company as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and other factors that could cause actual results or performance to differ materially from those expressed or implied in the forward-looking statements. These risks and uncertainties are described in Part I, Item 1A of this Annual Report on Form 10-K. You are urged to carefully review the disclosures we make concerning risks and other factors that may affect the outcome of our forward-looking statements and our business and operating results, including those made in Part I, Item 1A of this Annual Report on Form 10-K 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 update or revise these forward-looking statements to reflect new information or events after the date of this document or to reflect the occurrence of unanticipated events, except as required by law.

Item 1. Business

General

Western Digital Corporation ("Western Digital") is on a mission to unlock the potential of data by harnessing the possibility to use it. We are a leading developer, manufacturer, and provider of data storage devices based on both flash-based products ("Flash") and hard disk drives ("HDD") technologies. With dedicated business units driving advancements in NAND flash and magnetic recording technologies, we create and drive innovations needed to help customers capture, preserve, access, and transform an ever-increasing diversity of data.

Founded in 1970 in Santa Ana, California, Western Digital is now a Standard & Poor's 500 ("S&P 500") company headquartered in San Jose, California. We have one of the technology industry's most valuable patent portfolios with approximately 13,500 active patents worldwide. We have a rich heritage of innovation and operational excellence, a wide range of intellectual property ("IP") assets and broad research and development ("R&D") capabilities. The strong growth in amount, value, and use of data continues, creating a global need for larger, faster and more capable storage solutions.

We are a customer-focused organization that has developed deep relationships with industry leaders to continue to deliver innovative solutions to help users capture, store and transform data across a boundless range of applications. With much of the world's data stored on Western Digital products, our innovation powers the global technology ecosystem from consumer devices to the edge to the heart of the cloud. We enable cloud, Internet, and social media infrastructure players to build more powerful, cost effective and efficient data centers. We help original equipment manufacturers ("OEM") address storage opportunities and solutions to capture and transform data in a myriad of devices and edge technologies. We have also built strong consumer brands with tools to manage vast libraries of personal content and to push the limits of what's possible for storage. At Western Digital, we continue to transform ourselves to address the growth in data by providing what we believe to be the broadest range of storage technologies in the industry with a comprehensive product portfolio and global reach.

Industry

We operate in the data storage industry. The ability to access, store and share data from anywhere on any device is increasingly important to our customers and end users. From the intelligent edge to the cloud, data storage is a fundamental component underpinning the global technology architecture. Our strengths in innovation and cost leadership, diversified product portfolio and broad routes to market provide a foundation upon which we are solidifying our position as an essential building block of the digital economy. There is tremendous market opportunity flowing from the rapid global adoption of the technology architecture built with cloud infrastructure tied to intelligent endpoints all connected by high performance networks. The value and urgency of data storage at every point across this architecture has never been clearer.

The growth in computing complexity, cloud computing applications, connected mobile devices and Internet connected products, and edge devices is driving unabated growth in the volume of digital content to be stored and used. This growth has led to a creation of new form factors for data storage. The storage industry is increasingly utilizing tiered architectures with HDD, solid state drives ("SSD") and other non-volatile memory-based storage to address an expanding set of uses and applications. We believe our expertise and innovation across both Flash and HDD technologies enable us to bring powerful solutions to a broader range of applications. We continuously monitor the full array of storage technologies, including reviewing these technologies with our customers, to ensure we are appropriately resourced to meet our customers' storage needs.

Competition

Our industry is highly competitive. We compete with manufacturers of Flash and HDD for cloud, client, and consumer end markets. In Flash, we compete with vertically integrated suppliers such as Kioxia, Micron Technology, Inc., Samsung Electronics Co., Ltd., SK hynix, Inc., Solidigm, Yangtze Memory Technologies Co., Ltd. and numerous smaller companies that assemble flash into products. In HDD, we compete with Seagate Technology plc and Toshiba Electronic Devices & Storage Corporation.

Business Strategy

Our overall strategy is to leverage our innovation, technology and execution capabilities to be an industry-leading and broad-based developer, manufacturer and provider of storage devices and solutions that support the infrastructure that has enabled the unabated proliferation of data. We believe we are the only company in the world with large-scale capabilities to develop and manufacture a portfolio of integrated data storage solutions that are based on both Flash and HDD technologies. We strive to successfully execute our strategy through the following foundational elements in order to create long-term value for our customers, partners, investors and employees:

- Innovation and Cost Leadership: We continue to innovate and develop advanced technologies across platforms for both Flash and HDD to deliver timely new products and solutions to meet growing demands for scale, performance and cost efficiency in the market.
- Broad Product Portfolio: We leverage our capabilities in firmware, software and systems in both Flash and HDD to deliver compelling and differentiated integrated storage solutions to our customers that offer the best combinations of performance, cost, power consumption, form factor, quality and reliability, while creating new use cases for our solutions in emerging markets.
- Operational Excellence: We are focused on delivering the best value for our customers in cloud, client and consumer
 end markets through a relentless focus on appropriately scaling our operations across both Flash and HDD
 technologies to efficiently support business growth; achieving best in class cost, quality and cycle-time; maintaining
 industry leading manufacturing capabilities; and having a competitive advantage in supply-chain management.

Our strategy provides the following benefits, which distinguish us in the dynamic and competitive data storage industry:

- a broad product portfolio that differentiates us as a leading developer and manufacturer of integrated products and solutions based on both Flash and HDD, making us a more strategic supply partner to our large-scale customers who have storage needs across the data infrastructure ecosystem;
- efficient and flexible manufacturing capabilities, allowing us to leverage our Flash and HDD R&D and capital expenditures to deliver innovative and cost-effective storage solutions to multiple markets; and
- deep relationships with industry leaders across the data ecosystems that give us the broadest routes to market.

In June 2022, we announced that we are reviewing potential strategic alternatives aimed at further optimizing long-term value for our stockholders. The Executive Committee of our Board, chaired by our CEO, is overseeing the assessment process, and the potential strategic alternatives include, among other things, options for separating our Flash and HDD business units.

Technology

Flash Technologies. Flash products provide non-volatile data storage based on flash technology. We develop and manufacture solid state storage products for a variety of applications including enterprise or cloud storage, client storage, automotive, mobile devices and removable memory devices. Over time, we have successfully developed and commercialized successive generations of 3-dimensional flash technology with increased numbers of storage bits per cell in an increasingly smaller form factor, further driving cost reductions. We devote significant research and development resources to the development of highly reliable, high-performance, cost-effective flash-based technology and are pursuing developments in next generation flash-based technology capacities. We are leveraging our expertise, resources and strategic investments in non-volatile memories to explore a wide spectrum of persistent memory and storage class memory technologies. We have also initiated, defined and developed standards to meet new market needs and to promote wide acceptance of flash storage standards through interoperability and ease-of-use.

Hard Disk Drives. HDD products provide non-volatile data storage by recording magnetic information on a rotating disk. We develop and manufacture substantially all of the recording heads and magnetic media used in our HDD products. We have led the industry in innovation to drive increased areal density and high-performance attributes. Our improvements in HDD capacity, which lower product costs over time, have been enabled largely through advancements in magnetic recording head and media technologies. Our multi-year product roadmap for high-capacity HDD, which combine ePMR, OptiNAND, UltraSMR and triple stage actuators to deliver a cutting edge portfolio of drives, in commercial volumes, at a wide variety of capacity points, puts Western Digital in great position to capitalize on the opportunities presented by the large and growing storage markets We invest considerable resources in R&D, manufacturing infrastructure and capital equipment for recording head and media technology, as well as other aspects of the magnetic recording system such as HDD mechanics, controller and firmware technology, in order to secure our competitive position and cost structure.

Our products generally leverage a common platform for various products within product families, and in some cases across product families, resulting in the commonality of components which reduces our exposure to changes in demand, facilitates inventory management and allows us to achieve lower costs through purchasing economies. This platform strategy also enables our customers to leverage their qualification efforts onto successive product models.

Our Data Solutions

Our broad portfolio of technology and products address multiple end markets and are comprised of the Western Digital®, SanDisk® and WD brands®. In 2022, we refined the end markets we report to be "Cloud", "Client" and "Consumer".

Cloud represents a large and growing end market comprised primarily of products for public or private cloud environments and enterprise customers, which we believe we are uniquely positioned to address as the only provider of both flash and hard drive products. We provide the Cloud end market with an array of high-capacity enterprise HDD and high-performance enterprise SSD, and platforms. Our capacity enterprise helium hard drives provide high-capacity storage needs and low total cost of ownership per GB for the growing cloud data center market. These drives are primarily for use in data storage systems, in tiered storage models and where data must be stored reliably for years. Our high-performance enterprise class SSD include high-performance flash-based SSD and software solutions that are optimized for performance applications providing a range of capacity and performance levels primarily for use in enterprise servers and supporting high volume on-line transactions, data analysis and other enterprise applications. We also provide higher value data storage platforms to the market.

Through the Client end market, we provide our OEM and channel customers a broad array of high-performance flash and hard drive solutions across personal computer ("PC"), mobile, gaming consoles, automotive, virtual reality headsets, at-home entertainment, and industrial spaces. We provide numerous data solutions that we incorporate into our client's devices, which consist of HDD and SSD desktop and notebook PCs, smart video systems, gaming consoles and set top boxes, as well as flash-based embedded storage products for mobile phones, tablets, notebook PCs and other portable and wearable devices, automotive applications, Internet of Things, industrial and connected home applications. Our HDD and SSD are designed for use in devices requiring high performance, reliability and capacity with various attributes such as low cost per gigabyte, quiet acoustics, low power consumption and protection against shocks.

The Consumer end market is highlighted by our broad range of retail and other end-user products, which capitalize on the strength of our product brand recognition and vast points of presence around the world. We provide consumers with a portfolio of HDD and SSD embedded into external storage products and removable Flash, which include cards, universal serial bus ("USB") flash drives and wireless drives, through our retail and channel routes to market. Our external HDD storage products in both mobile and desktop form factors provide affordable, high quality, reliable storage for backup and capacity expansion that are designed to keep digital content secure. We offer client portable SSD with a range of capacities and performance characteristics to address a broad spectrum of the client storage market. Our removable cards are designed primarily for use in consumer devices, such as mobile phones, tablets, imaging systems, cameras and smart video systems. Our USB flash drives are used in the computing and consumer markets and are designed for high-performance and reliability. Our wireless drive products allow in-field back up of created content, as well as wireless streaming of high-definition movies, photos, music and documents to tablets, smartphones and PCs.

Research and Development

We devote substantial resources to the development of new products and the improvement of existing products. We focus our engineering efforts on optimizing our product design and manufacturing processes to bring our products to market in a cost-effective and timely manner. For a discussion of associated risks, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

Patents, Licenses and Proprietary Information

We rely on a combination of patents, trademarks, copyright and trade secret laws, confidentiality procedures and licensing arrangements to protect our IP rights.

We have approximately 13,500 active patents worldwide and have many patent applications in process. We continually seek additional United States ("U.S.") and international patents on our technology. We believe that, although our active patents and patent applications have considerable value, the successful manufacturing and marketing of our products also depends upon the technical and managerial competence of our staff. Accordingly, the patents held and applied for cannot alone ensure our future success.

In addition to patent protection of certain IP rights, we consider elements of our product designs and processes to be proprietary and confidential. We believe that our non-patented IP, particularly some of our process technology, is an important factor in our success. We rely upon non-disclosure agreements, contractual provisions and a system of internal safeguards to protect our proprietary information. Despite these safeguards, there is a risk that competitors may obtain and use such information. The laws of foreign jurisdictions in which we conduct business may provide less protection for confidential information than the laws of the U.S.

We rely on certain technology that we license from other parties to manufacture and sell our products. We believe that we have adequate cross-licenses and other agreements in place in addition to our own IP portfolio to compete successfully in the storage industry. For a discussion of associated risks, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

Manufacturing

We believe that we have significant know-how, unique product manufacturing processes, test and tooling, execution skills, human resources and training to continue to be successful and to grow our manufacturing operations as necessary. We strive to maintain manufacturing flexibility, high manufacturing yields, reliable products and high-quality components. The critical elements of our production of Flash and HDD are high-volume and utilization, low-cost assembly and testing, strict adherence to quality metrics and maintaining close relationships with our strategic component suppliers to access best-in-class technology and manufacturing capacity. We continually monitor our manufacturing capabilities to respond to the changing requirements of our customers and maintain our competitiveness and position as a data technology leader.

Flash and HDD manufacturing are complex processes involving the production and assembly of precision components with narrow tolerances and rigorous testing. The manufacturing processes involve a number of steps that are dependent on each other and occur in "clean room" environments that demand skill in process engineering and efficient space utilization to control the operating costs of these manufacturing environments. We continually evaluate our manufacturing processes in an effort to increase productivity, sustain and improve quality and decrease manufacturing costs. For example, we are taking aggressive actions to restructure our client HDD manufacturing footprint in light of ongoing trends in the HDD Client market as PCs shift from using HDD to Flash technology. We continually evaluate which steps in the manufacturing process would benefit from automation and how automated manufacturing processes can improve productivity and reduce manufacturing costs. We also leverage contract manufacturers when strategically advantageous.

Our vertically integrated, in-house assembly and test operations for our HDD products are concentrated in Prachinburi and Bang Pa-In, Thailand; Penang, Johor Bahru, and Kuching, Malaysia; Laguna, Philippines; Shenzhen, China; San Jose and Fremont, CA, USA.

Ventures with Kioxia

Substantially all of our flash-based supply requirements for Flash is obtained from our ventures with Kioxia, which provide us with leading-edge, high-quality and low-cost flash memory wafers. While substantially all of our flash memory supply utilized for our products is purchased from these ventures, from time-to-time, we also purchase flash memory from other flash manufacturers. While we do not unilaterally control the operations of our ventures with Kioxia, we believe that our business venture relationship with Kioxia helps us reduce product costs, increases our ability to control the quality of our products and speeds delivery of our products to our customers. Our business ventures with Kioxia are located primarily in Yokkaichi and Kitakami, Japan, and our in-house assembly and test operations are located in Shanghai, China and Penang, Malaysia.

We and Kioxia currently operate three business ventures in 300-millimeter flash-based manufacturing facilities in Japan, which provide us leading-edge, cost-competitive flash-based memory wafers for our end products. Through Flash Partners Ltd., Flash Alliance Ltd., and Flash Forward Ltd., which we collectively refer to as Flash Ventures, we and Kioxia collaborate in the development and manufacture of flash-based memory wafers using semiconductor manufacturing equipment owned or leased by each of the Flash Venture entities. We hold a 49.9% ownership position in each of the Flash Venture entities. Each Flash Venture entity purchases wafers from Kioxia at cost and then resells those wafers to us and Kioxia at cost plus a small mark-up. We are obligated to take our share of the output from these ventures or pay for variable costs incurred in producing our share of Flash Ventures' flash-based memory wafer supply, based on our three-month forecast, which generally equals 50% of Flash Ventures' output. In addition, we are obligated to 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 50.0% of each Flash Ventures entity's capital investments to the extent that the Flash Ventures entity's operating cash flow is insufficient to fund these investments. We co-develop flash technologies (including process technology and memory design) with Kioxia and contribute IP for Flash Ventures' use.

The agreements governing the operations of the Flash Venture entities also set out a framework for any investment by the joint venture partners in flash manufacturing capacity. Since its inception, Flash Ventures' primary manufacturing site has been located in Yokkaichi, Japan. The Yokkaichi site, which is owned and operated by Kioxia, currently includes five wafer fabrication facilities. We have jointly invested, and intend to continue to jointly invest, with Kioxia in manufacturing equipment for the Yokkaichi fabrication facilities. We also have agreements that extend Flash Ventures to a wafer fabrication facility located in Kitakami, Japan, referred to as "K1", which is operated by Kioxia Iwate Corporation, a wholly owned subsidiary of Kioxia. The primary purpose of K1 is to provide clean room space to continue the transition of existing flash-based wafer capacity to newer technology nodes. K1 is now fully operational. In January 2022, we entered into additional agreements regarding Flash Ventures' investment in a new wafer fabrication facility currently under construction in Yokkaichi, Japan, referred to as "Y7", which upon completion will be the sixth wafer fabrication facility at the Yokkaichi site. The primary purpose of Y7 is to provide clean room space to continue the transition of existing flash-based wafer capacity to newer flash technology nodes. The first phase of construction of Y7 is complete and output is expected to commence in the first half of 2023.

For a discussion of risks associated with our business ventures with Kioxia, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

Materials and Supplies

Our Flash consists of flash-based memory, controllers and firmware and other components. Substantially all of our flash-based memory is supplied by our business ventures with Kioxia. Controllers are primarily designed in-house and manufactured by third-party foundries or acquired from third-party suppliers. We believe the use of our in-house assembly and test facilities, as well as contract manufacturers, provides flexibility and gives us access to increased production capacity. We have developed deep relationships with these vendors and Kioxia to establish continuous supply of flash-based memory and controllers.

HDD consists primarily of recording heads, magnetic media, controllers and firmware, and a printed circuit board assembly. We design and manufacture substantially all of the recording heads and magnetic media required for our products. As a result, we are more dependent upon our own development and execution efforts for these components and less reliant on recording head and magnetic media technologies developed by other manufacturers. We depend on an external supply base for all remaining components and materials for use in our HDD product design, manufacturing, and testing. We believe the use of our in-house manufacturing, assembly and test facilities provides the controls necessary to provide the demanding capabilities, performance and reliability our customers require.

We generally retain multiple suppliers for our component requirements but, for business or technology reasons, we source some of our components from a limited number of sole or single source providers. For a discussion of associated risks, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

Sales and Distribution

We sell our products to computer manufacturers and OEMs, cloud service providers, resellers, distributors and retailers throughout the world. We maintain sales offices in selected parts of the world including the major geographies of the Americas, Asia Pacific, Europe and the Middle East. Our international sales, which include sales to foreign subsidiaries of U.S. companies but do not include sales to U.S. subsidiaries of foreign companies, represented 71%, 78% and 72% of our net revenue for 2022, 2021 and 2020, respectively. Sales to international customers are subject to certain risks not normally encountered in domestic operations, including exposure to tariffs and various trade regulations. For a discussion of associated risks, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

We perform our marketing and advertising functions internally and through outside firms utilizing both consumer media and trade publications targeting various reseller and end-user markets. We also maintain customer relationships through direct communication and by providing information and support through our website. In accordance with standard storage industry practice, we provide distributors and retailers with limited price protection and programs under which we reimburse certain marketing expenditures. We also provide distributors, resellers and OEMs with other sales incentive programs.

For each of 2022, 2021 and 2020, no single customer accounted for 10% or more of our net revenue.

Seasonality

We have historically experienced seasonal fluctuations in our business with higher levels of demand in the first and second quarters as a result of increased customer spending. Seasonality can also be impacted by the growth in emerging markets and macroeconomic conditions. For a discussion of associated risks, see Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K.

Service and Warranty

We generally warrant our newly manufactured products against defects in materials and workmanship from one to five years from the date of sale depending on the type of product, with a small number of products having a warranty ranging up to ten years or more. Our warranty obligation is generally limited to repair or replacement. We have engaged third parties in various countries in multiple regions to provide various levels of testing, processing, or recertification of returned products for our customers. For additional information regarding our service and warranty policy, see Part II, Item 8, Note 1, *Organization and Basis of Presentation*, and Note 5, *Supplemental Financial Statement Data*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Human Capital Management

We have been on a journey to transform the Company and redefine the data storage market. Our employees are paramount to our success. To this end, our people strategy is grounded in the intention to hire, engage and retain the best talent to support our vision of creating breakthrough innovation that enables the world to actualize its aspirations. In 2022, we hired a new Chief People Officer to help accelerate the transformation of our human resources function to be more people-centric and to drive better outcomes for the business. We employ approximately 65,000 people worldwide, and our diverse team spans 38 countries. By geography, approximately 86% of our employees are in Asia Pacific, 12% in the Americas, and 2% in Europe, the Middle East and Africa.

Diversity, Equity and Inclusion

We want to leverage the power and potential of diversity. We are committed to promoting an inclusive environment where every individual can thrive through a sense of belonging, respect and contribution.

Our Employee Resource Groups ("ERGs") help create an inclusive culture that embraces the uniqueness of our employees. We have several ERG communities, focusing on women, LGBTQ+, racial and ethnic minorities, military and people with disabilities. In 2022, we were once again recognized by Human Rights Campaign Best Places to Work for LGBTQ+ Equality 2022. We also received the Above and Beyond Award and the Pro Patria Award from the Employer Support of the Guard and Reserve for our support of employees who serve in the U.S. National Guard and Reserve.

We are committed to hiring inclusively, providing training and development opportunities and ensuring equitable pay for employees, and we are continuing to focus on increasing diverse representation at every level of our company. As of July 1, 2022, four of the nine members of our Board of Directors were women, and women represented 26% of our management positions and 23% of our technical staff. Additionally, members of Asian, Black/African American, Hispanic/Latinx or other racially or ethnically diverse communities, represented 60% of our U.S. management positions. We believe that developing a diverse talent pool of new college graduates is essential, and we saw percentage point increases of 2.5 for women, 1.4 for Hispanic/Latinx and 1.0 for multiracial representation among our new college graduates in 2022. For additional detail about our workforce, we encourage you to review our Sustainability Report, which we publish annually and make available on our corporate website. Nothing on our website shall be deemed incorporated by reference into this Annual Report on Form 10-K.

In 2022, we launched a self-identification initiative that invited employees to share more about who they are across dimensions of gender, gender identity, veterans and disabilities. Participation was optional, data was protected and the results were anonymized. We believe an in-depth understanding of our employee population will enable us to better engage and retain our talent.

Compensation and Benefits

We believe in the importance of investing in our people, and we do that through a robust Total Rewards program. We benchmark our compensation and benefits programs annually using market data from reputable third-party consultants. We also conduct internal focus groups and employee surveys to inform programs and identify opportunities.

We promote a strong pay-for-performance culture and offer employees competitive compensation consisting of base salary and both short-term and long-term incentives. In the last year, we also implemented a global recognition program to celebrate the contributions of employees who bring our core values and cultural attributes to life.

To ensure that our pay practices are fair and equitable, we conduct an annual pay equity assessment to ensure that men and women receive equal pay for equal work. As part of this review, we analyze current pay which takes into consideration various, non-discriminatory factors, such as seniority, experience, skills, performance, location, track and hiring and promotion dates. We use the results to make pay adjustments as needed. We are expanding our analysis of 2022 pay equity to cover 100% of our employee population globally.

We also believe in creating an environment that allows our employees to prioritize their health and well-being. We provide competitive benefits, including health coverage, life and disability insurance, retirement, paid time off, an employee assistance program and an employee stock purchase plan. In response to employee input in 2022, we expanded benefit access for our employees to caregivers and enhanced behavioral health benefits for dependent children in the U.S.; enhanced medical coverage in our larger countries; and offered flexible benefits in India.

Talent Attraction, Development and Engagement

Foundational to our people strategy is the attraction, development and engagement of our employees. We need a workforce that is as unique and diverse as our customer base, and it starts with talent attraction. To increase the talent level of our diverse candidate pools, we adopted a skills-based philosophy that screens and hires employees based on capabilities and potential, and we plan to continue the implementation of these practices in 2023. In the last year, we conducted an anonymous hiring pilot to identify and remove any potential for bias from our hiring process and broaden our diverse talent pool and tested technology to make sure that job descriptions utilize inclusive language. We also deliver unconscious bias training to leaders equipping them to lead inclusively and identify unconscious bias.

Developing our talent is key to helping us reach our business goals and retaining our people. We foster an environment of continuous learning through initiatives like our annual Career Month with virtual events, on-demand learning and resources to help employees create a Career Success Statement and Development Map so that they can chart their career journey and track their progress. We are investing in leadership development through our flagship program Leader Essentials to help people at all levels cultivate skills such as effective communication, creating an inclusive culture and building effective relationships. We also continue to develop the next generation of talent with our New College Grad program.

Ongoing engagement is a keystone to our people strategy. We believe that listening is crucial to identifying opportunities to strengthen employee engagement as well as influencing our overall strategy. In 2022, we had an overall employee survey participation rate of 90%. Key strengths that employees identified were that they felt that their work was meaningful, they are excited about our future, and they would recommend their manager to others. We also engage employees by taking actions to promote and ground them in our core values and beliefs as a company, so that we are conducting business in an ethical way. As a result of this focus, in 2022, we were named one of the World's Most Ethical Companies by Ethisphere Institute for the fourth consecutive year. Our employees also regularly engage in a wide range of hands-on volunteering and matching campaigns that support the communities in which they work and live.

Health and Safety

We are committed to creating a safe work environment everywhere we operate. We provide extensive health and safety resources and training to all of our employees, especially for those who work in our manufacturing and operations. We use an integrated management system to manage health and safety standards at our manufacturing facilities.

Furthermore, in response to the ongoing COVID-19 pandemic, we continue to practice our global resiliency plans, which have allowed us to maintain 24/7 operations. At each global Western Digital site, we have local, cross-functional teams responsible for our efforts to meet or exceed local COVID regulations, including providing real-time data to leaders, implementing changes to our physical workplaces and providing robust employee and family benefits to those impacted by COVID. We have welcomed employees who transitioned to working from home during the pandemic back to the office and have offered a flexible hybrid work model for certain employees.

Government Regulation

Our worldwide business activities are subject to various laws, rules, and regulations of the United States as well as of foreign governments. Compliance with these laws, rules, and regulations has not had a material effect upon our capital expenditures, results of operations, or competitive position. Nevertheless, compliance with existing or future governmental regulations, including, but not limited to, those pertaining to global trade, the environment, consumer and data protection, employee health and safety, and taxes, could have a material impact on our business in subsequent periods. See Part I, Item 1A, *Risk Factors* for a discussion of these potential impacts.

Corporate Responsibility and Sustainability

We believe responsible and sustainable business practices support our long-term success. As a company, we are deeply committed to protecting and supporting our people, our environment, and our communities. That commitment is reflected through sustainability-focused initiatives as well as day-to-day activities, including our adoption of sustainability-focused policies and procedures, our publicly-recognized focus on fostering an inclusive workplace, our constant drive toward more efficient use of materials and energy, our careful and active management of our supply chain, our community-focused volunteerism programs and philanthropic initiatives, and our impactful, globally-integrated ethics and compliance program.

- We seek to protect the human rights and civil liberties of our employees through policies, procedures, and programs that avoid risks of compulsory and child labor, both within our company and throughout our supply chain.
- We foster a workplace of dignity, respect, diversity, and inclusion through our recruiting and advancement practices, internal communications, and employee resource groups.
- We educate our employees annually on relevant ethics and compliance topics, publish accessible guidance on ethical issues and related company resources in our Global Code of Conduct, and encourage reporting of ethical concerns through any of several global and local reporting channels.
- We support local communities throughout the world, focusing on hunger relief, environmental quality, and STEM (science, technology, engineering, and math) education, especially for underrepresented and underprivileged youth.
- We utilize a robust integrated management system, with associated policies and procedures, to evaluate and manage occupational health and safety risks, environmental compliance, and chemical and hazardous substance risks.
- We work to minimize our impacts on the environment through emissions reduction targets and other initiatives and to
 evaluate and enhance our climate resiliency.
- We innovate to reduce the energy used by our products, the energy used to manufacture them, and the amount of new materials required to manufacture them.

Available Information

We maintain an Internet website at www.westerndigital.com. The information on our website is not incorporated in this Annual Report on Form 10-K. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available on our website at www.westerndigital.com, free of charge, as soon as reasonably practicable after the electronic filing of these reports with, or furnishing of these reports to, the Securities and Exchange Commission ("SEC"). The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including us.

Item 1A. Risk Factors

Our business can be affected by a number of risks and uncertainties, which could cause material harm to our actual operating results and financial condition. The risks discussed below are not the only ones facing our business but represent risks that we believe are material to us. Additional risks not presently known to us or that we currently deem immaterial may also negatively affect our business.

OPERATIONAL RISKS

Adverse global or regional conditions could harm our business.

A large portion of our revenue is derived from our international operations, and many of our products and components are produced overseas. As a result, our business depends significantly on global and regional conditions. Adverse changes in global or regional economic conditions, including, but not limited to, volatility in the financial markets, tighter credit, recession, inflation, rising interest rates, slower growth in certain geographic regions, political uncertainty, geopolitical tensions or conflicts, other macroeconomic factors, changes to social conditions and regulations, could significantly harm demand for our products, increase credit and collectability risks, result in revenue reductions, reduce profitability as a result of underutilization of our assets, cause us to change our business practices, increase manufacturing and operating costs or result in impairment charges or other expenses.

Our revenue growth is significantly dependent on the growth of international markets, and we may face challenges in international sales markets. We are subject to risks associated with our global manufacturing operations and global sales efforts, as well as risks associated with our utilization of contract manufacturers, including:

- obtaining governmental approvals and compliance with evolving foreign 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;
- exchange, currency and tax controls and reallocations;
- weaker protection of IP rights;
- trade restrictions, such as export controls, export bans, import restrictions, embargoes, sanctions, license and
 certification requirements (including semiconductor, encryption and other technology), tariffs and complex customs
 regulations; and
- difficulties in managing international operations, including appropriate internal controls.

As a result of these risks, our business could be harmed.

Public health crises, including the COVID-19 pandemic, have had, and could in the future have, a negative effect on our business.

The COVID-19 pandemic has impacted and may continue to impact our workforce and operations, and those of our strategic partners, customers, suppliers and logistics providers. These impacts include under-absorbed overhead, increased logistics, component and other costs, decreased demand for our products and manufacturing challenges. While our manufacturing facilities and those used by Flash Ventures are all currently operational, we have experienced and may experience in the future temporary closures of certain manufacturing facilities related to the pandemic. Future outbreaks of infectious disease or other public health crises may have a similar impact.

The effects of such health crises, including the COVID-19 pandemic, are uncertain and difficult to predict, but may include:

- Disruptions to our supply chain, our operations or those of our strategic partners, customers or suppliers caused by employees or others contracting infectious diseases, or governmental orders to contain the spread of infectious disease, such as travel restrictions, quarantines, shelter in place orders, trade controls and business shut-downs;
- Deterioration of worldwide credit markets that may limit our ability or increase our cost to obtain external financing to fund our operations and capital expenditures and result in a higher rate of losses on our accounts receivables due to customer credit defaults:
- Extreme volatility in financial markets, which may harm our ability to access the financial markets on acceptable terms:

- Increased data security and technology risk as some employees continue to work from home, including possible
 outages to systems and technologies critical to remote work and increased data privacy risk with cybercriminals
 attempting to take advantage of the disruption; and
- Reduced productivity or other disruptions of our operations if workers in our factories or our other worksites are
 exposed to or spread infectious diseases to other employees.

The degree to which the COVID-19 pandemic or future public health crises ultimately impact our business will depend on many factors beyond our control, which are highly uncertain and cannot be predicted at this time.

We are dependent on a limited number of qualified suppliers who provide critical services, materials or components, and a disruption in our supply chain could negatively affect our business.

We depend on an external supply base for technologies, software (including firmware), preamps, controllers, dynamic random-access memory, 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 worldwide justin-time hubs and distribution centers and to meet our freight needs. Many of the components and much of the equipment we acquire must be specifically designed for use in our products or for developing and manufacturing our products, and are only available from a limited number of suppliers, some of whom are our sole-source suppliers. We therefore depend on these suppliers to meet our business needs including dedicating adequate engineering resources to develop components that can be successfully integrated into our products.

Our suppliers have in the past been, and may in the future be, unable or unwilling to meet our requirements, including as a result of events outside of their control such as trade restrictions (including tariffs, quotas and embargoes), geopolitical conflicts, public health emergencies, or natural disasters. If we are unable to purchase sufficient quantities from our current suppliers or qualify and engage additional suppliers, or if we cannot purchase materials at a reasonable price, we may not be able to meet demand for our products. Trade restrictions, including tariffs, quotas and embargoes, demand from other high-volume industries for materials or components used in our products, disruptions in supplier relationships or shortages in other components and materials used in our customers' products could result in increased costs to us or decreased demand for our products, which could negatively impact our business. Delays, shortages 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 business.

We do not have long-term contracts with some of our existing suppliers, nor do we always have guaranteed manufacturing capacity with our suppliers, so we cannot guarantee that they will devote sufficient resources or capacity to manufacturing our products. Any significant problems that occur at our suppliers could lead to product shortages or quality assurance problems. When we do have contractual commitments with suppliers in an effort to stabilize the supply of our components, those commitments may require us to buy a substantial number of components or make significant cash advances to the supplier and may not result in a satisfactory supply of our components.

In addition, our supply base has experienced industry consolidation. Our suppliers may be acquired by our competitors, decide to exit the industry, or redirect their investments and increase costs to us. 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 increased. 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.

Our operations, and those of certain of our suppliers and customers, are subject to substantial risk of damage or disruption.

We conduct our operations at large, high-volume, purpose-built facilities in California and throughout Asia. The facilities of many of our customers, our suppliers and our customers' suppliers are also concentrated in certain geographic locations throughout Asia and elsewhere. If a fire (including a climate change-related fire), flood, earthquake, tsunami or other natural disaster, condition or event such as a power outage, contamination event, terrorist attack, cybersecurity incident, physical security breach, political instability, civil unrest, localized labor unrest or other employment issues, or a health epidemic negatively affects any of these facilities, it would significantly affect our ability to manufacture or sell our products and source components and harm our business. Possible impacts include work and equipment stoppages and damage to or closure of our

facilities, or those of our suppliers or customers, for an indefinite period of time. Climate change has in the past and is expected to continue to increase the incidence and severity of certain natural disasters. In addition, the geographic concentration of our manufacturing sites could exacerbate the negative impacts resulting from any of these problems.

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 damage to our facilities, as these types of insurance are sometimes not available or available only at a prohibitive cost. Climate change may reduce the availability and/or increase the cost of certain types of insurance by contributing to an increase in the incidence and severity of certain natural disasters. We depend upon Kioxia to obtain and maintain sufficient property, business interruption and other insurance for Flash Ventures. If Kioxia fails to do so, we could suffer significant unreimbursable losses, and such failure could also cause Flash Ventures to breach various financing covenants.

The loss of our key 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. Changes in our key management team can result in loss of continuity, loss of accumulated knowledge, departure of other key employees, disruptions to our operations and inefficiency during transitional periods. Global competition for skilled employees in the technology industry is intense, and our business success becomes increasingly dependent on our ability to retain our key staff and skilled employees, to implement succession plans for our key management and staff, to attract, integrate and retain new skilled employees. Additionally, uncertainty about the structure and organization of our business as a result of our ongoing strategic review could negatively impact our ability to recruit and retain key staff and skilled employees. Changes in immigration policies may also impair our ability to recruit and hire technical and professional talent.

Our employee hiring and retention also depend on our ability to build and maintain a diverse and inclusive workplace culture and be viewed as an employer of choice. Additionally, because a substantial portion of our key employees' compensation is placed "at risk" and linked to the performance of our business, including through equity compensation, when our operating results are negatively impacted, we may be at a competitive disadvantage for retaining and hiring key management, staff and skilled employees. If we are unable to hire and retain key management, staff or skilled employees, our operating results would likely be harmed.

If our technology infrastructure, systems or products are compromised, damaged or interrupted by cyber attacks, data security breaches, other security problems, design defects or sustain system failures, our business could be negatively impacted.

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 obtain in the future, access to our computer systems and networks, including cloud-based platforms. The technology infrastructure and systems of some 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 ransomware, computer denial-of-service attacks, worms, and other malicious software programs or other attacks, and covert introduction of malware to computers and networks, including those using techniques that change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event or that may continue undetected for an extended period of time. Cyber attacks may also include impersonation of authorized users, efforts to discover and exploit any design flaws, bugs, security vulnerabilities or security weaknesses, intentional or unintentional acts by employees or other insiders with access privileges, intentional acts of vandalism or fraud 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 increasingly organized and well-financed or supported by state actors, and are developing increasingly sophisticated systems and means to not only attack systems, but also to evade detection or to obscure their activities. Geopolitical tensions or conflicts may create heightened risk of cyber attacks.

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. 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. To the extent our products are hacked or the encryption schemes are compromised or breached, this could harm our business by requiring us to employ additional resources to fix the errors or defects, exposing us to litigation and indemnification claims and hurting our reputation.

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 of actual or perceived breaches, we could experience additional costs, notification requirements, civil and administrative fines and penalties, indemnification claims, litigation, and damage to our brand and reputation. All of these consequences could harm our reputation and our business and materially and negatively impact our operating results and financial condition.

We are subject to risks related to product defects, 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, including as a result of third-party components or applications that we incorporate in our products, 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 ODM customers. Our business liability insurance may be inadequate or future coverage may be unavailable on acceptable terms, which could negatively 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 provisions 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, they could harm our business.

BUSINESS AND STRATEGIC RISKS

Our review of potential strategic alternatives may not result in an executed or consummated transaction or other strategic alternative, and the process of reviewing strategic alternatives or its conclusion could adversely affect our business and our stockholders.

In June 2022, we announced that we are reviewing potential strategic alternatives aimed at further optimizing long-term value for our stockholders. The potential strategic alternatives include, among other things, the option to separate our Flash and HDD business units. In conjunction with that review process, the Company announced that it had entered into a letter agreement with Elliott Investment Management L.P. ("Elliott"), which had disclosed in May 2022 a \$1 billion investment in our Company and called for a full strategic review of our business. We are actively working with financial advisors and the Company's legal counsel in this strategic review process.

Any potential transaction or other strategic alternative would be dependent on a number of factors that may be beyond our control, including, among other things, market conditions, industry trends, regulatory approvals, and the availability of financing for a potential transaction on reasonable terms. The process of reviewing potential strategic alternatives may be time consuming, distracting and disruptive to our business operations, which may cause concern to our current or potential customers, employees, investors, strategic partners and other constituencies and may have a material impact on our business and operating results and/or result in increased volatility in our share price. We have and will continue to incur substantial

expenses associated with identifying, evaluating and negotiating potential strategic alternatives. There can be no assurance that any potential transaction or other strategic alternative, if consummated, will provide greater value to our stockholders than that reflected in the current price of our common stock. Until the review process is concluded, perceived uncertainties related to our future may result in the loss of potential business opportunities and volatility in the market price of our common stock and may make it more difficult for us to attract and retain qualified personnel and business partners. Similarly, other activist investors may engage in proxy solicitations or advance shareholder proposals, or otherwise attempt to affect changes and assert influence on our Board and management, which could lead to the impacts on our business, board, management and employees discussed above.

We rely substantially on strategic relationships with various partners, including Kioxia, which subjects us to risks and uncertainties that could harm our business.

We have entered into and expect to continue to enter into strategic relationships with various partners for product development, manufacturing, sales growth and the supply of technologies, components, equipment and materials for use in our product design and manufacturing, including our business ventures with Kioxia. We depend on Flash Ventures for the development and manufacture of flash-based memory. Our strategic relationships, including Flash Ventures, are 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 and makes our financial results particularly susceptible to variations from our forecasts and expectations. A failure to accurately forecast supply and demand could cause us to over-invest or under-invest in technology transitions or the expansion of Flash Ventures' capacity. Over-investment by us or our competitors 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. We are contractually obligated to pay for 50% of the fixed costs of Flash Ventures regardless of whether we order any flash-based memory, and our orders placed with Flash Ventures on a three-month rolling basis are binding. On the other hand, if we under-invest in Flash Ventures, or otherwise grow or transition Flash Ventures' capacity too slowly, we may not have enough supply of flash-based memory, or the right type of flash-based memory, 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 supply is limited, we might make strategic decisions with respect to the allocation of our supply among our products and customers, which could result in less favorable gross margins or damage customer relationships.

Our control over the operations of our business ventures may be limited, and our interests could diverge from our strategic partners' interests regarding ongoing and future activities. For example, under the Flash Ventures agreements, we cannot unilaterally direct most of Flash Ventures' activities, and we have limited ability to source or fabricate flash outside of Flash Ventures. Flash Ventures requires significant investments by both Kioxia and us for technology transitions and capacity expansions, and our business could be harmed if our technology roadmap and investment plans are not sufficiently aligned with Kioxia's. Lack of alignment with Kioxia with respect to Flash Ventures could negatively impact our ability to stay at the forefront of technological advancement. Misalignment could arise due to changes in Kioxia's strategic priorities, management, ownership and/or access to capital, which have changed in recent years and could continue to change. Kioxia's stakeholders may include, or have included in the past, competitors, customers, a private equity firm, government entities and/or public stockholders. Kioxia's management changes, ownership and capital structure could lead to delays in decision-making, disputes or changes in strategic direction that could negatively impact the strategic partnership, and therefore us. There may exist conflicts of interest between Kioxia's stakeholders and Flash Ventures or us with respect to, among other things, protecting and growing Flash Ventures' business, IP and competitively sensitive confidential information.

Together with Kioxia, we fund a portion of the investments required for Flash Ventures through lease financings. Continued availability of lease financings for Flash Ventures is not guaranteed and could be limited by several factors, including our and/or Kioxia's financial performance and changes to our and/or Kioxia's business, ownership or corporate structure. To the extent that lease financings are not accessible on favorable terms or at all, more cash would be required to fund investments.

Our strategic relationships are subject to additional risks that could harm our business, including, but not limited to, the following:

• failure by our strategic partners to comply with applicable laws;

- difficulties and delays in product and technology development at, ramping production at, and transferring technology to, our strategic partners;
- failure by our strategic partners to timely fund capital investments with us or otherwise meet their commitments, including paying amounts owed to us or third parties when due;
- we may lose the rights to, or ability to independently manufacture, certain technology or products being developed or manufactured by strategic partners, including if any of them is acquired by another company, files for bankruptcy or experiences financial or other losses;
- a bankruptcy event involving a strategic partner could result in structural changes to and/or termination of the strategic partnership; and
- changes in tax or regulatory requirements may necessitate changes to the agreements governing our strategic partnerships.

We participate in a highly competitive industry that is subject to declining average selling prices ("ASPs"), volatile demand, rapid technological change and industry consolidation, as well as lengthy product qualifications, all of which could negatively impact our business.

Demand for our devices, software and solutions, which we refer to in this Item 1A as our "products", depends in large part on the demand for systems 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 in the storage market, including the effects of new fab capacity, macroeconomic factors, business conditions, technology transitions and other actions taken by us or our competitors. The storage market has experienced volatile product life cycles, which can harm our ability to recover the cost of product development, and periods of excess capacity, which can lead to liquidation of excess inventories, significant reductions in ASPs and negative impacts on our revenue and gross margins.

Further, our ASPs and gross margins tend to decline when there is a shift in the mix of product sales to lower 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 has experienced consolidation over the past several years, which could enhance the resources and lower the cost structure of some competitors. These factors could result in a substantial decrease in our market share and harm our business.

As we compete in new product areas, the overall complexity of our business may increase and may result in increases in R&D expenses and substantial investments in manufacturing capability, technology enhancements and go-to-market capability. We must also qualify our products with customers through potentially lengthy testing processes with uncertain results. Some of our competitors offer products that we do not offer, which may allow them to win sales from us, and some of our customers may be developing storage solutions internally, which may reduce their demand for our products. We expect that competition will continue to be intense, and our competitors may be able to gain a product offering or cost structure advantage over us, which would harm our business. Further, our competitors may utilize pricing strategies, including offering products at prices at or below cost, that we may be unable to competitively match. We may also have difficulty effectively competing with manufacturers benefiting from governmental investments and may be subject to increased complexity and reduced efficiency in our supply chain as a result of governmental efforts to promote domestic semiconductor industries in various jurisdictions.

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

The markets for our products continuously undergo technology transitions that we must anticipate to adapt our existing products or develop new products effectively. If we fail to implement new technologies or develop new products desired by our customers quickly and cost-effectively, our business may be harmed.

In addition, the success of our technology transitions and product development depends on a number of other factors, including:

R&D expenses and results;

- difficulties faced in manufacturing ramp;
- market acceptance/qualification;
- effective management of inventory levels in line with anticipated product demand;
- the vertical integration of some of our products, which may result in more capital expenditures and greater fixed costs than if we were not vertically integrated;
- our ability to cost effectively respond to customer requests for new products or features (including requests for more
 efficient and efficiently-produced products with reduced environmental impacts) and software associated with our
 products;
- our ability to increase our software development capability; and
- the effectiveness of our go-to-market capability in selling new products.

Moving to new technologies and products may require us to align to, and build, a new supply base. Our success in new product areas may depend on our ability to enter into favorable supply agreements. 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.

Additionally, new products could substitute for our current products and make them obsolete. We also develop products to meet certain industry and technical standards, which may change and cause us to incur substantial costs as we adapt to new standards or invest in different manufacturing processes to remain competitive.

We experience sales seasonality and cyclicality, which could cause our operating results to fluctuate. In addition, accurately forecasting demand has become more difficult, which could harm our business.

Sales of many of our products tend to be seasonal and subject to supply-demand cycles. Changes in seasonal and cyclical supply and demand patterns have made it, and could continue to make it, more difficult for us to forecast demand. Changes in the product or channel mix of our business can also impact seasonal and cyclical patterns. For example, 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 each quarter. As a result of the above or other factors, our forecast of financial results for a given quarter may differ materially from our actual financial results.

The variety and volume of products we manufacture are based in part on accurately forecasting market and customer demand for our products. Accurately forecasting demand has also become increasingly difficult for us, our customers and our suppliers due to volatility in global economic conditions, end market dynamics and industry consolidation, resulting in less availability of historical market data for certain product segments. Further, for many of our OEM customers 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, we could experience periods of product oversupply, excess inventory, and price decreases, which could impact our sales, ASPs and gross margin, thereby negatively 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.

Failure to successfully execute on strategic initiatives including acquisitions, divestitures or cost saving measures may negatively impact our future results.

We have made and expect to continue to make acquisitions and divestitures, and engage in cost saving measures. 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 and integration of processes and systems. We may not be able to continue to identify or complete appealing acquisition or investment opportunities given the intense competition for these transactions. 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. There have been and may continue to be difficulties with implementing new systems and processes or with integrating systems and processes of companies with complex operations, which can result in inconsistencies in standards, controls, procedures and policies and may increase the risk that our internal controls are found to be ineffective.

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 negatively 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 stockholders as well as earn-out or other contingent consideration payments 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 negatively affect our business. 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.

Cost saving measures, restructurings and divestitures may result in workforce reduction and consolidation of our manufacturing or other facilities. As a result of these actions, 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, that additional costs will not offset any such reductions or consolidations or that we do not forego future business opportunities as a result of these actions.

Loss of revenue from a key customer, or consolidation among our customer base, could harm our operating results.

Historically, nearly one half of our total 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. We have experienced and may in the future experience events such as the loss of a key customer, prohibition or restriction of sales to a key customer by law, regulation or other government action, reductions in sales to or orders by a key customer, customer requirements to reduce our prices before we are able to reduce costs or the acquisition of a key customer by one of our competitors. These events have impacted, and may in the future impact, our operating results and financial condition. Further, government authorities may implement laws or regulations or take other actions that could result in significant changes to the business or operating models of our customers. Such changes could negatively impact our operating results.

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 negatively impact 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 cloud storage and computing platforms, 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 negatively impact 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.

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 business 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. As a result of the shift to mobile devices, 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 business could suffer. Additionally, if the distribution market weakens as a result of 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, our operating results would be negatively impacted. Negative changes in the creditworthiness 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, negative 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. Further, changes to the retail environment, such as store closures caused by macroeconomic conditions or changing customer preferences, may reduce the demand for our products. 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 negatively impacted.

FINANCIAL RISKS

Our level of debt may negatively impact our liquidity, restrict our operations and ability to respond to business opportunities, and increase our vulnerability to adverse economic and industry conditions.

We utilize debt financing in our capital structure and may incur additional debt, including under our revolving credit facility, subject to customary conditions in our loan agreement. Our level of debt could have significant consequences, which include, but are not limited to, the following:

- limiting our ability to obtain additional financing 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;
- imposing financial and other restrictive covenants on our operations, including limiting our ability to (i) consolidate or merge with or into, or sell all or substantially all of our assets to, another person; (ii) enter into sale/leaseback transactions; (iii) incur additional indebtedness and (iv) incur liens 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 our debt service obligations, comply with our debt covenants and deleverage depends on our cash flows and financial performance, which are affected by financial, business, economic and other factors. The rate at which we will be able to or choose to deleverage is uncertain. Failure to meet our debt service obligations or comply with our debt covenants 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. We may not have sufficient funds available to repay accelerated indebtedness, 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 harm our business. Refinancing our indebtedness may also require us to expense previous debt issuance costs or to incur new debt issuance costs.

As our bank debt contains a variable interest rate component based on our corporate credit ratings, a decline in our ratings could result in increased interest rates and debt service obligations. In addition, 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 as to 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.

We also guarantee a significant amount of lease obligations of Flash Ventures owed to third parties. Flash Ventures sells to and leases back a portion of its equipment from a consortium of financial institutions. Most of the lease obligations are guaranteed 50% by us and 50% by Kioxia. Some of the lease obligations are guaranteed in full by us. The leases are subject to customary covenants and cancellation events that relate to Flash Ventures and each of the guarantors. If a cancellation event were to occur, Flash Ventures would be required to negotiate a resolution with the 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, increased interest rates or waiver fees. If a resolution is not reached, we may be required to pay all 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.

We may from time to time seek to further refinance our substantial indebtedness by issuing additional shares of common stock or other securities that are convertible into common stock or grant the holder the right to purchase common stock, each of which may dilute our existing stockholders, reduce the value of our common stock, or both.

Tax matters may materially affect our financial position and results of operations.

Changes in tax laws in the United States, the European Union and around the globe have impacted and will continue to impact our effective worldwide tax rate, which may materially affect our financial position and results of operations. 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, including cash movements, could increase our worldwide effective tax rate and harm our business. Beginning in our fiscal year 2023, the Tax Cuts and Jobs Act of 2017 eliminates the option to deduct research and development expenditures in the year incurred, requiring amortization in accordance with IRC Section 174. If this requirement is not repealed or otherwise modified, it will materially increase our effective tax rate and reduce our operating cash flows. Additionally, 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.

Our determination of our tax liability in the U.S. and other jurisdictions is subject to review by applicable domestic and foreign tax authorities. For example, as disclosed in Part I, Item 1, Note 14, Income Tax Expense, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K, we are under examination by the Internal Revenue Service for certain fiscal years. 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 litigation or the payment of significant 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 harm our business.

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. When such events occur, they have had, and may in the future have, a negative impact on our business.

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 negatively 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 may 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 may actually 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, 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. Our customers' credit risk may also be exacerbated by an economic downturn or other adverse global or regional economic conditions. 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.

LEGAL AND COMPLIANCE RISKS

We are subject to laws, rules, and regulations relating to the collection, use, sharing, and security of 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 relating to the collection, use, and security and privacy 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 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. Laws and regulations relating to the collection, use, security and privacy of third-party data change over time and new laws and regulations become effective from time to time. We are subject to notice and privacy policy requirements, as well as obligations to respond to requests to know and access personal information, correct personal information, delete personal information and say no to the sale of personal information. 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. We may also be subject to restrictions on cross-border data transfers and requirements for localized storage of data that could increase our compliance costs and risks and affect the ability of our global operations to coordinate activities and respond to customers. 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.

We are subject to state, federal and international legal and regulatory requirements, such as environmental, labor, health and safety, trade and public-company reporting and disclosure regulations, customers' standards of corporate citizenship, and industry and coalition standards, such as those established by the Responsible Business Alliance ("RBA"), and compliance with those regulations and requirements could cause an increase in our operating costs and failure to comply may harm our business.

We are subject to, and may become subject to additional, state, federal and international laws and regulations governing our environmental, labor, trade, health and safety practices and public-company reporting and disclosures requirements. 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, customers 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, which could impair our ability to conduct business in certain jurisdictions or with certain customers and harm our operating results. 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, which could substantially increase the complexity of our public-company reporting and disclosure requirements and our compliance and operating costs. If we or our suppliers, customers or partners fail to timely comply with applicable legislation, certain 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 could harm our business.

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 or our suppliers, customers or partners 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.

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.

From time to time, we are involved in litigation, including 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. 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, affect demand for our products and 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.

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 harm our business.

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.

Our reliance on IP and other proprietary information subjects us to the risk that these key components 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 negatively 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 exclusive forum provisions in our Bylaws could limit our stockholders' ability to bring a claim in a judicial forum that it finds favorable for disputes with the Company or its directors, officers or other employees.

Our Bylaws provide that, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any current or former director, officer or other employee of the Company or its stockholders, (iii) any action or proceeding asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or the Company's Certificate of Incorporation or Bylaws, or (iv) any action or proceeding asserting a claim governed by the internal affairs doctrine (the "Delaware Exclusive Forum Provision"). Our Bylaws further provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action under the Securities Act of 1933, as amended (the "Federal Forum Provision").

The Delaware Exclusive Forum Provision is intended to apply to claims arising under Delaware state law and would not apply to claims brought pursuant to the Exchange Act or the Securities Act, or any other claim for which the federal courts have exclusive jurisdiction. In addition, the Federal Forum Provision is intended to apply to claims arising under the Securities Act and would not apply to claims brought pursuant to the Exchange Act. The exclusive forum provisions in the Company's Bylaws will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder and, accordingly, actions by our stockholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder must be brought in federal courts. Our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

The exclusive forum provisions in the Company's Bylaws may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with the company or its directors, officers or other employees, which may discourage lawsuits against the Company and its directors, officers and other employees. In addition, stockholders who do bring a claim in the Court of Chancery of the State of Delaware pursuant to the Delaware Exclusive Forum Provision could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. The court in the designated forum under our exclusive forum provisions may also reach different judgments or results than would other courts, including courts where a stockholder would otherwise choose to bring the action, and such judgments or results may be more favorable to the Company than to our stockholders. Further, the enforceability of similar exclusive forum provisions in other companies' organizational documents has been challenged in legal proceedings, and it is possible that a court could find any of our exclusive forum provisions to be inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings. If a court were to find all or any part of our exclusive forum provisions to be inapplicable or unenforceable in an action, we might incur additional costs associated with resolving such action in other jurisdictions.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. *Properties*

Our principal executive offices are located in San Jose, California. Our leased facilities have contracts expiring at various times through 2034. Our principal manufacturing, R&D, marketing and administrative facilities as of July 1, 2022 were as follows:

Location	Buildings Owned or Leased	Approximate Square Footage	Description
United States			
California			
Fremont	Leased	290,000	HDD manufacturing of head wafers and R&D
Irvine	Leased	431,000	HDD R&D, administrative, marketing and sales
Milpitas	Owned	589,000	Flash R&D, marketing and sales, and administrative
San Jose	Owned	2,275,000	Manufacturing of head wafers, head, media and product development, R&D for Flash and HDD, administrative, marketing and sales
Colorado			
Longmont	Leased	87,000	Flash R&D
Colorado Springs	Leased	59,000	HDD R&D
Minnesota			
Rochester	Leased	156,000	Flash and HDD product development
Asia			
China			
Shanghai	Owned	914,000	Flash assembly and test of SSD
Shenzhen	Owned and Leased	563,000	HDD manufacturing of media
Japan			
Fujisawa	Owned	661,000	HDD product development
Malaysia			
Johor	Owned	277,000	HDD manufacturing of substrates
Kuala Lumpur	Owned	145,000	HDD R&D and administrative
Kuching	Owned	285,000	HDD manufacturing and development of substrates
Penang	Owned	1,889,000	Assembly and test of SSD, manufacturing of media, and R&D for Flash and HDD $$
Philippines			
Laguna	Owned	632,000	HDD manufacturing of HGAs and slider fabrication
Thailand			
Bang Pa-In	Owned and Leased	1,595,000	HDD slider fabrication, manufacturing of HDDs and HGAs, and R&D
Prachinburi	Owned	1,568,000	HDD manufacturing
India			
Bangalore	Owned and Leased	1,261,000	Flash R&D and administrative
Middle East			
Israel			
Kfar Saba	Owned	167,000	Flash R&D
Tefen	Owned	64,000	Flash R&D

We also lease office space in various other locations throughout the world primarily for R&D, sales, operations, administration and technical support. We believe our present facilities are adequate for our current needs, although we update our facilities from time to time to meet anticipated future technological and market requirements. In general, new manufacturing facilities can be developed and become operational within approximately 12 to 24 months should we require such additional facilities.

Substantially all of our flash-based memory wafers are manufactured by Kioxia in purpose-built, wafer fabrication facilities located in Yokkaichi and Kitakami, Japan.

Item 3. Legal Proceedings

See Part II, Item 8, Note 14, *Income Tax Expense*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for disclosures regarding statutory notices of deficiency issued by the Internal Revenue Service ("IRS") in June 2018 and December 2018, petitions filed by the Company with the U.S. Tax Court in September 2018 and March 2019, additional penalties asserted by the IRS in March 2021 and further Amendments to Answers filed by the IRS in June 2021 and January 2022, and a tentative resolution with respect to such matters.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information for Common Stock

Our common stock is listed on the Nasdaq Global Select Market ("Nasdaq") under the symbol "WDC." The approximate number of holders of record of our common stock as of August 11, 2022 was 874.

Dividends

In April 2020, we suspended our quarterly cash dividend. For more information about our dividend policy. see Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations - Short and Long-term Liquidity*.

Stock Performance Graph

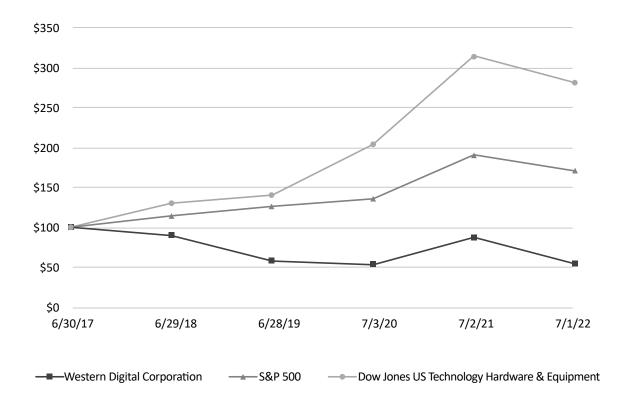
The following graph compares the cumulative total stockholder return of our common stock with the cumulative total return of the S&P 500 Index and the Dow Jones U.S. Technology Hardware & Equipment Index for the five years ended July 1, 2022. The graph assumes that \$100 was invested in our common stock at the close of market on June 30, 2017 and that all dividends were reinvested. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

TOTAL RETURN TO STOCKHOLDERS

(Assumes \$100 investment at market close on June 30, 2017)

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Western Digital Corporation, the S&P 500 Index and the Dow Jones US Technology Hardware & Equipment Index



Total Return Analysis

	June 30, 2017	June 29, 2018	June 28, 2019	July 3, 2020	July 2, 2021	July 1, 2022
Western Digital Corporation	\$ 100.00	\$ 89.48	\$ 57.44	\$ 52.78	\$ 87.32	\$ 54.00
S&P 500 Index	\$ 100.00	\$ 114.37	\$ 126.29	\$ 135.77	\$ 191.15	\$ 170.86
Dow Jones U.S. Technology Hardware & Equipment Index	\$ 100.00	\$ 130.26	\$ 140.45	\$ 204.31	\$ 315.74	\$ 281.89

The stock performance graph shall not be deemed soliciting material or to be filed with the SEC or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 or to the liabilities of Section 18 of the Securities Exchange Act of 1934, nor shall it be incorporated by reference into any past or future filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically request that it be treated as soliciting material or specifically incorporate it by reference into a filing under the Securities Act of 1933 or the Securities Exchange Act of 1934.

Item 6. [Reserved]

[Reserved]

Item 7. 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 Consolidated Financial Statements and the notes thereto included in Part II, Item 8 of this Annual Report on Form 10-K. See also "Forward-Looking Statements" immediately prior to Part I, Item 1 of this Annual Report on Form 10-K.

Our Company

We are on a mission to unlock the potential of data by harnessing the possibility to use it. We are a leading developer, manufacturer, and provider of data storage devices based on both flash-based products ("Flash") and hard disk drives ("HDD") technologies. With dedicated business units driving advancements in NAND flash and magnetic recording technologies, we create and drive innovations needed to help customers capture, preserve, access, and transform an ever-increasing diversity of data.

Our broad portfolio of technology and products address multiple end markets. In 2022, we refined the end markets we report to be "Cloud", "Client" and "Consumer". Cloud represents a large and growing end market comprised primarily of products for public or private cloud environments and enterprise customers, which we believe we are uniquely positioned to address as the only provider of both Flash and HDD. Through the Client end market, we provide our original equipment manufacturer ("OEM") and channel customers a broad array of high-performance flash and hard drive solutions across personal computer, mobile, gaming, automotive, virtual reality headsets, at-home entertainment, and industrial spaces. The Consumer end market is highlighted by our broad range of retail and other end-user products, which capitalize on the strength of our product brand recognition and vast points of presence around the world.

Our fiscal year ends on the Friday nearest to June 30 and typically consists of 52 weeks. Approximately every five to six years, we report a 53-week fiscal year to align the fiscal year with the foregoing policy. Fiscal years 2022 and 2021, which ended on July 1, 2022 and July 2, 2021, respectively, are comprised of 52 weeks, with all quarters presented consisting of 13 weeks. Fiscal year 2020, which ended on July 3, 2020, was comprised of 53 weeks, with the first quarter consisting of 14 weeks and the remaining quarters consisting of 13 weeks each.

Key Developments

Business Structure and Strategic Alternatives

In 2021, we made and announced the decision to reorganize our business by forming two separate product business units: Flash and HDD. The new structure is intended to provide each business unit with focus and responsibility for identifying current and future customer requirements while driving the strategy, roadmap, pricing and overall profitability for their respective product areas. To align with the new operating model and business structure, we made management organizational changes and implemented new reporting modules and processes to provide discrete information to manage the business. Effective July 3, 2021, management finalized its assessment of our operating segments and concluded that we now have two reportable segments: Flash and HDD.

In June 2022, we announced that we are reviewing potential strategic alternatives aimed at further optimizing long-term value for stockholders. The Executive Committee of our Board of Directors is overseeing the assessment process and evaluating a range of alternatives, including options for separating our Flash and HDD business units. In conjunction with that review process, we announced that we had entered into a letter agreement with Elliott Investment Management L.P. ("Elliott"), which had disclosed in May 2022 a \$1 billion investment in our Company and called for a full strategic review of our business. We are actively working with financial advisors and our legal counsel in this strategic review process.

Tax Resolution

As previously disclosed, we have received statutory notices of deficiency and notices of proposed adjustments from the Internal Revenue Service ("IRS") with respect to 2008 through 2015. During 2022, new information became available which required us to re-measure our unrecognized tax benefits for this IRS matter. We and the IRS tentatively reached a settlement for resolving this matter. Additional information is provided in our discussion of Income tax expense in our results of operations below, as well as in Part I, Item 1, Note 14, *Income Tax Expense*, of the Notes to the Consolidated Financial Statements, and in the "Short- and Long-Term Liquidity-Unrecognized Tax Benefits" section below.

In February 2022, contamination of certain material used in manufacturing processes occurred at Flash Ventures' fabrication facilities in both Yokkaichi and Kitakami, Japan which resulted in damage to inventory units in production, a temporary disruption to production operations and a reduction in our flash wafer availability. During 2022, we incurred charges of \$207 million related to this contamination incident that were recorded in cost of revenue and primarily consisted of scrapped inventory and rework costs, decontamination and other costs needed to restore the facilities to normal capacity, and under absorption of overhead costs. We are evaluating potential options for recovery.

Financing Activities

During 2022, we continued to execute on our commitment to reduce our overall debt levels and Fitch Ratings, Inc. raised our Company credit rating to investment grade in December 2021. We fully repaid our Term Loan B-4 in October 2021 and shortly thereafter initiated a series of transactions to further reduce our debt levels and better stagger the maturities of our debt. In December 2021, we issued \$500 million aggregate principal amount of 2.850% senior unsecured notes due February 1, 2029 (the "2029 Notes") and we issued \$500 million aggregate principal amount of 3.100% senior unsecured notes due February 1, 2032 (the "2032 Notes"). We used the proceeds from these note offerings and available cash to voluntarily repay \$1.21 billion of our Term Loan A-1 and reduce the principal amount to \$3.0 billion as of December 31, 2021. In January 2022, we amended and restated our existing loan agreement to provide for, among other things: (i) the issuance of a new \$3.0 billion Term Loan A-2 maturing in January 2027 to replace our previously existing Term Loan A-1; (ii) the availability of a new \$2.25 billion revolving credit facility; and (iii) additional covenant flexibility and other modifications. As of July 1, 2022, over 80% of the principal amount of our debt is now due in 2026 or later. We believe this new debt structure gives us greater financial stability and flexibility to manage our business over the longer term.

Additional information regarding our indebtedness, including the principal repayment terms, interest rates, covenants and other key terms of our outstanding indebtedness, is included in Part II, Item 8, Note 8, *Debt*, of the Notes to Consolidated Financial Statements in this Annual Report on Form 10-K.

New Flash Ventures Fabrication Facility

In January 2022, we entered into additional agreements regarding Flash Ventures' investment in a new wafer fabrication facility currently under construction in Yokkaichi, Japan, referred to as "Y7". The primary purpose of Y7 is to provide clean room space to continue the transition of existing flash-based wafer capacity to newer flash technology nodes. The first phase of construction of Y7 is complete and output is expected to commence in the first half of 2023. We are committed to pay, among other items, future building depreciation prepayments of approximately \$268 million in 2023 and \$22 million in 2024, to be credited against future wafer charges.

COVID-19 Pandemic and Operational Update

As the ongoing COVID-19 pandemic has evolved, we have implemented and maintained more thorough sanitation practices as outlined by health organizations and supported vaccination efforts. We continually monitor and update our practices based on recommendations from health organizations to ensure the continued safety of our employees and business partners. In addition, the responses to COVID-19 taken by others in the supply chain have contributed to the increases in the costs of their services, which have in turn impacted our operations. We incurred incremental charges primarily related to logistics, absorption, and other factory-related costs of approximately \$248 million and \$127 million, during 2022 and 2021, respectively, which were recorded in Cost of revenue.

The technology hardware and semiconductor industries faced supply chain disruptions and component shortages during 2022, which negatively impacted both our customers' ability to ship products and our ability to build products. In order to meet our end customers' demand, we are incurring increased component costs, which primarily impacted our hard drive gross margins in 2022. Additionally, the global economy has recently experienced significant volatility and disruptions impacted by increases in inflation rates, Russia's invasion of Ukraine and rising fuel prices, rising interest rates, declines in consumer confidence, declines in economic growth, and uncertainty about economic stability. We are seeing our PC OEM customers aggressively right-size their inventory to reflect current demand conditions, which will impact our business in this market in the second half of the calendar year. While we ultimately expect that the impact of these conditions will be transitory, the severity and duration of the impact of these conditions on our business is dynamic and cannot be predicted.

We believe we have made significant progress in strengthening our product portfolio to meet our customers' growing and evolving storage needs. Our BiCS5 based products continue to play a significant role in driving top line results across our end markets as we move further along the product roadmap. Additionally, OptiNAND and shingled magnetic recording ("SMR") technologies are progressing as planned as we have commenced commercial shipments on a number of OptiNand-based products and are undergoing qualifications of our latest 26-terabyte SMR drive. For our next generation 3D-flash technology, we continued commercial shipment of consumer flash devices based on our 162-layer BiCS6 technology as we expect to start ramping the technology towards the end of calendar year 2022. We are also aware of the ongoing trends in the HDD Client market as PCs shift from using HDD to Flash technology. As a result, we have and are still undergoing actions to restructure our HDD manufacturing footprint to reflect this market dynamic.

We will continue to actively monitor these situations and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, partners, suppliers, and stakeholders, or as required by federal, state, or local authorities. See Part I, Item 1A, *Risk Factors*, of this Annual Report on Form 10-K for more information regarding the risks we face as a result of the COVID-19 pandemic, supply chain disruptions and current macroeconomic conditions.

Russia Sanctions

In February 2022, the U.S. and other countries imposed sanctions on Russia. In accordance with these sanctions, we have ceased shipments to distributors for customers located in Russia. Our revenue from distributors for customers in Russia have not been significant. We have no material assets or operations in Russia.

Results of Operations

Summary Comparison of 2022, 2021 and 2020

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

	 2022			2021			2020	
			in mi	llions, except	percentages	s)		
Revenue, net	\$ 18,793	100.0 %	\$	16,922	100.0 %	\$	16,736	100.0 %
Cost of revenue	 12,919	68.7		12,401	73.3		12,955	77.4
Gross profit	5,874	31.3		4,521	26.7		3,781	22.6
Operating Expenses:								
Research and development	2,323	12.4		2,243	13.3		2,261	13.5
Selling, general and administrative	1,117	5.9		1,105	6.5		1,153	6.9
Employee termination, asset impairment, and other charges	43	0.2		(47)	(0.3)		32	0.2
Total operating expenses	3,483	18.5		3,301	19.5		3,446	20.6
Operating income	2,391	12.7		1,220	7.2		335	2.0
Interest and other income (expense):								
Interest income	6	_		7	_		28	0.2
Interest expense	(304)	(1.6)		(326)	(1.9)		(413)	(2.5)
Other income, net	 30	0.2		26	0.2		4	_
Total interest and other expense, net	(268)	(1.4)		(293)	(1.7)		(381)	(2.3)
Income (loss) before taxes	2,123	11.3		927	5.5		(46)	(0.3)
Income tax expense	623	3.3		106	0.6		204	1.2
Net income (loss)	\$ 1,500	8.0 %	\$	821	4.9 %	\$	(250)	(1.5)%

Percentages may not total due to rounding.

The following table sets forth, for the periods presented, a summary of our segment information:

	2022			2021		2020	
		(in m	illions,	except percen	ıtages)		
Net revenue:							
Flash	\$	9,753	\$	8,706	\$	7,769	
HDD		9,040		8,216		8,967	
Total net revenue	\$	18,793	\$	16,922	\$	16,736	
Gross profit:							
Flash	\$	3,527	\$	2,611	\$	1,903	
HDD		2,661		2,221		2,602	
Unallocated corporate items:							
Amortization of acquired intangible assets		(66)		(331)		(610)	
Stock-based compensation expense		(48)		(55)		(51)	
Contamination related charges		(207)		_			
Recoveries from a power outage incident		7		75		(68)	
Other		_		_		5	
Total unallocated corporate items		(314)		(311)		(724)	
Consolidated gross profit	\$	5,874	\$	4,521	\$	3,781	
Gross margin:							
Flash		36.2%		30.0%		24.5%	
HDD		29.4%		27.0%		29.0%	
Consolidated gross margin		31.3%		26.7%		22.6%	

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

	 2022		2021	2020
		((in millions)	
Revenue by End Market				
Cloud	\$ 8,017	\$	5,723	\$ 7,018
Client	7,076		7,281	6,335
Consumer	 3,700		3,918	3,383
Total Revenue	\$ 18,793	\$	16,922	\$ 16,736
Revenue by Geography				
Asia	\$ 10,054	\$	9,455	\$ 8,366
Americas	5,867		4,406	5,444
Europe, Middle East and Africa	 2,872		3,061	2,926
Total Revenue	\$ 18,793	\$	16,922	\$ 16,736
Exabytes Shipped	645		541	518

Net Revenue

Net revenue increased 11% in 2022 compared to 2021, which reflects increases in exabytes of Flash and HDD sold as further discussed below. The net revenue increases driven by exabyte growth were partially offset by declines in the average price per gigabyte of storage for both Flash and HDD as product mix shifted to more efficient, high-capacity drives.

Despite the temporary disruption to our Flash production from the contamination event at Flash Ventures' fabrication facilities in both Yokkaichi and Kitakami, Japan, Flash revenue increased 12% in 2022 compared to 2021, primarily driven by a 21% increase in exabytes sold, partially offset by a decline in the average price per gigabyte as product mix shifted to more efficient, high-capacity drives. The higher exabytes sold primarily reflected the growth in Cloud and the ramp of our latest BiCS5 flash solutions. Higher volume was also driven by strong demand in gaming along with a growing brand recognition of WD Black based products in our Consumer market.

HDD revenue increased 10% in 2022, compared to 2021, primarily driven by a 19% increase in exabytes sold, partially offset by a decline in the average price per gigabyte as product mix shifted to more efficient higher-capacity drives. The increase in exabytes sold was due to continued demand for our latest generation energy assisted drives among our public and private cloud customers as discussed below. The increase in Cloud was partly offset by a decline in HDD exabytes sold in our Client and Consumer end markets due to continued pressure in the commercial channel related to component issues impacting our customers' ability to ship product and greater component sourcing constraints within our own operations, and customers transitioning to client SSD.

The increase in Cloud revenue in 2022 compared to 2021 was led by the demand increase for HDD capacity enterprise drives, including growth in our 18-terabyte capacity drives and ramp of our 20-terabyte and 22-terabyte capacity drives. Additionally, revenue from Flash for enterprise SSD applications more than doubled in 2022 compared to 2021. In Client, the decrease in revenue in 2022 compared to 2021, primarily reflected a mid-30% decrease in client HDD revenue, as a result of the supply chain disruptions noted previously, as well as lower shipments of PCs toward the end of 2022, partially offset by an increase in Flash revenue due to the ramp of 5G phones. In Consumer, the decrease in revenues in 2022 compared to 2021 reflected declines in HDD as a result of short-term demand weakness tied to macroeconomic factors, as well as COVID-related measures.

The changes in net revenue by geography in 2022, compared to 2021 are primarily related to growth in Asia driven by the ramp in 5G products as well as routine variations in the mix of business.

For 2022, 2021 and 2020, our top 10 customers accounted for 45%, 39% and 42%, respectively, of our net revenue. For each of 2022, 2021 and 2020, no single customer accounted for 10% or more of our net revenue.

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 2022, 2021 and 2020, these programs represented 17%, 19% and 16%, respectively, of gross revenues, and adjustments to revenue due to changes in accruals for these programs have generally averaged less than 1% of gross revenue over the last three years. 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

Consolidated gross profit increased \$1.35 billion, or 30%, in 2022 compared to 2021, which reflects the increase in revenue in both Flash and HDD, the shift in product mix to more efficient higher-capacity drives, and cost efficiencies as we ramped production on new products, as well as a \$265 million decrease in charges in the current period related to amortization expense on acquired intangible assets, some of which became fully amortized. These improvements were partially offset by the contamination related charges of \$207 million noted above. Consolidated gross margin increased 4.6 percentage points over the prior year with Flash gross margin up 6.2 percentage points and HDD gross margin up 2.4 percentage points, which primarily reflected cost reductions as we ramped production on newer products. Consolidated gross margin also increased as a result of a shift in product mix to higher-margin flash drives.

Operating Expenses

R&D expense increased \$80 million in 2022 compared to 2021 as we continued to invest in new technologies. The primary drivers of the year-over-year change were increases in headcount and annual merit compensation, which accounted for approximately \$30 million of the overall increase, as well as a similarly sized increase in material use due to an increase in projects.

Selling, general and administrative ("SG&A") expense in 2022 was relatively flat compared to 2021 as we tightly managed costs in light of a dynamic macroeconomic environment.

The losses recognized in Employee termination, asset impairment and other charges compared to the gains in the prior year primarily reflect lower gains on the disposal of assets associated with our business realignment activities, partially offset by higher employee termination and other charges associated with our business realignment activities. For additional information regarding employee termination, asset impairment and other charges, see Part II, Item 8, Note 16, *Employee Termination, Asset Impairment, and Other Charges*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K

Interest and Other Income (Expense)

The decreases in total interest and other expense, net in 2022 compared to 2021 primarily reflects a decrease in interest expense resulting from the pay-down of principal on our debt during 2022.

Income Tax Expense

The Tax Cuts and Jobs Act (the "2017 Act"), enacted on December 22, 2017, includes a broad range of tax reform proposals affecting businesses. We completed our accounting for the tax effects of the enactment of the 2017 Act during the second quarter of 2019. However, the U.S. Treasury and the IRS have issued tax guidance on certain provisions of the 2017 Act since the enactment date, and we anticipate the issuance of additional regulatory and interpretive guidance. We applied a reasonable interpretation of the 2017 Act along with the then-available guidance in finalizing our accounting for the tax effects of the 2017 Act. Any additional regulatory or interpretive guidance would constitute new information, which may require further refinements to our estimates in future periods.

The following table sets forth Income tax information from our Consolidated Statement of Operations by dollar and effective tax rate:

		2022		2021		2020
)				
Income (loss) before taxes	\$	2,123	\$	927	\$	(46)
Income tax expense		623		106		204
Effective tax rate		29 %))	11 %		(443)%

The primary drivers of the difference between the effective tax rate for 2022 and the U.S. Federal statutory rate of 21%, are the relative mix of earnings and losses by jurisdiction, the deduction for foreign derived intangible income, credits, and tax holidays in Malaysia, the Philippines and Thailand that will expire at various dates during years 2024 through 2031. In addition, the effective tax rate for 2022 includes a net increase to the liability for unrecognized tax benefits, which includes interest and offsetting tax benefits, as a result of ongoing discussions with various taxing authorities of \$352 million. This amount includes \$324 million related to the effects of the tentative settlement with the IRS resolving the statutory notices of deficiency and notices of proposed adjustments with respect to 2008 through 2015.

The primary drivers of the difference between the effective tax rate for 2021 and the U.S. Federal statutory rate of 21% are the relative mix of earnings and losses by jurisdiction, the deduction for foreign derived intangible income, credits, and tax holidays in Malaysia, Philippines and Thailand that will expire at various dates during 2021 through 2031.

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. In particular, beginning in 2023, the 2017 Act requires us to capitalize and amortize research and development expenses rather than expensing them in year incurred, which is expected to both materially increase our effective tax rate and materially reduce our operating cash flows, if not repealed or otherwise modified. Our total tax expense in future 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 II, Item 8, Note 14, *Income Tax Expense*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

A discussion of our results of operations for 2020, including a comparison of such results of operations to 2021, is included in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, included in our Annual Report on Form 10-K for the year ended July 2, 2021 filed with the Securities and Exchange Commission on August 27, 2021.

Liquidity and Capital Resources

The following table summarizes our statements of cash flows:

	2022			2021	2020
				(in millions)	
Net cash provided by (used in):					
Operating activities	\$	1,880	\$	1,898	\$ 824
Investing activities		(1,192)		(765)	278
Financing activities		(1,718)		(817)	(1,508)
Effect of exchange rate changes on cash		(13)		6	(1)
Net increase (decrease) in cash and cash equivalents	\$	(1,043)	\$	322	\$ (407)

We and the IRS tentatively reached a settlement for resolving the statutory notices of deficiency and notices of proposed adjustments with respect to years 2008 through 2015. We expect to pay tax and interest totaling approximately \$600 million to \$700 million, which we expect to be partially offset by future reductions to our mandatory deemed repatriation tax obligations and tax savings from interest deductions aggregating to approximately \$100 to \$150 million. See Part I, Item 1, Note 14, Income Tax Expense for further details.

As further explained under Key Developments - Financing Activities above, we have taken recent actions to reduce our overall debt levels and extend the average maturity. Following these actions, we have reduced the outstanding principal amount of our debt by approximately \$1.73 billion since July 2, 2021 and over 80% of the principal amount is now due in 2026 or later. We also have an existing shelf registration statement (the "Shelf Registration Statement") filed with the Securities and Exchange Commission that expires in August 2024, which allows us to offer and sell shares of common stock, preferred stock, warrants, and debt securities. We used the Shelf Registration Statement to complete our offering of \$1.0 billion aggregate principal amount of senior unsecured notes in December 2021, and we may use the Shelf Registration Statement or other capital sources, including other offerings of equity or debt securities or the credit markets, to satisfy future financing needs, including planned or unanticipated capital expenditures, investments, debt repayments or other expenses. Any such additional financing will be subject to market conditions and may not be available on terms acceptable to us or at all.

During 2023, we expect expenditures for property, plant and equipment for our company plus our portion of the capital expenditures by our Flash Ventures joint venture with Kioxia for its operations to aggregate to \$3.2 billion. After consideration of the Flash Ventures' lease financing of its capital expenditures and net operating cash flow, we expect net cash used for our purchases of property, plant and equipment and net activity in notes receivable relating to Flash Ventures to be a cash outflow of approximately \$1.6 billion during 2023. 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.

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, capital expenditure needs and other cash material cash requirements for at least the next twelve months and the foreseeable future. Our ability to sustain our working capital position is subject to a number of risks that we discuss in Part I, Item 1A, *Risk Factors*, in this Annual Report on Form 10-K.

A total of \$1.82 billion and \$1.99 billion of our cash and cash equivalents was held outside of the U.S. as of July 1, 2022 and July 2, 2021, respectively. There are no material tax consequences that were not previously accrued for on the repatriation of this cash.

Operating Activities

Cash flow from operating activities primarily consists of net income, adjusted for non-cash charges, plus or minus changes in operating assets and liabilities. This represents our principal source of cash. Net cash used for changes in operating assets and liabilities was \$1.08 billion for 2022, as compared to \$175 million for 2021. Changes in our operating assets and liabilities are largely affected by our working capital requirements, which are dependent on the effective management of our cash conversion cycle as well as timing of payments for taxes. Our cash conversion cycle measures how quickly we can convert our products into cash through sales. At the end of the respective fourth quarters, the cash conversion cycles were as follows (in days):

	2022	2021	2020
Days sales outstanding	56	42	50
Days in inventory	107	98	87
Days payables outstanding	(66)	(63)	(67)
Cash conversion cycle	97	77	70

Changes in days sales outstanding ("DSO") are generally due to the timing of shipments. Changes in days in inventory ("DIO") are generally related to the timing of inventory builds. Changes in days payables outstanding ("DPO") 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 2022, DSO increased by 14 days over the prior year, reflecting timing of shipments, as well as more favorable customer terms in the prior year, partially offset by a decrease of approximately 6 days for higher factoring of receivables. We have seen no significant deterioration in our receivables as a result of COVID-19 or other market conditions. DIO increased by 9 days over the prior fiscal year, reflecting higher stocking levels of raw materials to minimize the risk of supply chain disruptions. DPO increased 3 days over the prior year, primarily reflecting routine variations in the timing of purchases and payments during the period.

Investing Activities

Net cash used in investing activities in 2022 primarily consisted of \$1.1 billion in capital expenditures and a \$91 million net increase in notes receivable issuance to Flash Ventures. Net cash used by investing activities in 2021 primarily consisted of a \$1.1 billion of capital expenditures, partially offset by a \$231 million net decrease in notes receivable issuances to Flash Ventures.

Our cash equivalents are primarily invested in money market funds that invest in U.S. Treasury securities and U.S. Government agency securities.

Financing Activities

During 2022, net cash used in financing activities primarily related to our efforts to reduce our overall level of debt. See "Key Development - Financing Activities" above for additional discussion. Net cash used in financing activities in 2021 primarily consisted of \$886 million for repayment of debt, which included \$600 million in voluntary prepayments on our Term Loan B-4, and \$56 million for taxes paid on vested stock awards under employee stock plans, partially offset by \$134 million of cash from the issuance of stock under our employee stock plans.

A discussion of our cash flows for the year ended July 3, 2020 is included in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources*, included in our Annual Report on Form 10-K for the year ended July 2, 2021 filed with the Securities and Exchange Commission on August 27, 2021.

Off-Balance Sheet Arrangements

Other than the commitments related to Flash Ventures incurred in the normal course of business and certain indemnification provisions (see "Short and Long-term Liquidity-Indemnifications" 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 Consolidated Financial Statements. Additionally, with the exception of Flash Ventures and our joint venture with Unisplendour Corporation Limited and Unissoft (Wuxi) Group Co. Ltd. ("Unis"), referred to as the "Unis Venture", we do not have an interest in, or relationships with, any variable interest entities. For additional information regarding our off-balance sheet arrangements, see Part II, Item 8, Note 10, *Related Parties and Related Commitments and Contingencies*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Short and Long-term Liquidity

Material Cash Commitments

The following is a summary of our known material cash commitments, including those for capital expenditures, as of July 1, 2022:

	 Total	1	Year (2023)	(20	-3 Years 024-2025)	-5 Years 026-2027)	5	ore than S Years ond 2027)
				(ir	n millions)			
Long-term debt, including current portion ⁽¹⁾	\$ 7,100	\$	_	\$	1,363	\$ 4,737	\$	1,000
Interest on debt	1,185		256		466	288		175
Flash Ventures related commitments ⁽²⁾	5,263		3,162		1,683	631		(213)
Operating leases	369		48		92	82		147
Purchase obligations and other commitments	3,705		2,467		989	99		150
Mandatory Deemed Repatriation Tax	765		106		384	275		_
Total	\$ 18,387	\$	6,039	\$	4,977	\$ 6,112	\$	1,259

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

Debt

In addition to our existing debt, we have \$2.25 billion available for borrowing under our revolving credit facility until January 2027, subject to customary conditions under the loan agreement. Additional information regarding our indebtedness, including information about 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 II, Item 8, Note 8, *Debt*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K. The loan agreement governing our revolving credit facility and our term loan A-2 due 2027 requires us to comply with a leverage ratio financial covenant. As of July 1, 2022, we were in compliance with this financial covenant.

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 leases are subject to customary covenants and cancellation events that relate to Flash Ventures and each of the guarantors. The occurrence of a cancellation event could result in an acceleration of the lease obligations and a call on our guarantees. As of July 1, 2022, we were in compliance with all covenants under these Japanese lease facilities. See Part II, Item 8, Note 10, *Related Parties and Related Commitments and Contingencies*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for information regarding Flash Ventures.

Purchase Obligations and Other Commitments

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. We also enter into long-term agreements with suppliers that contain fixed future commitments, which are contingent on certain conditions such as performance, quality and technology of the vendor's components. These arrangements are included under "Purchase obligations" in the table above.

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

Mandatory Deemed Repatriation Tax

The following is a summary of our estimated mandatory deemed repatriation tax obligations under the 2017 Act that are payable in the following fiscal years (in millions):

	 July 1, 2022
2023	\$ 106
2024	165
2025	219
2026	 275
Total	\$ 765

For additional information regarding our estimate of the total tax liability for the mandatory deemed repatriation tax, see Part II, Item 8, Note 14, *Income Tax Expense*, of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended June 28, 2019.

Unrecognized Tax Benefits

As of July 1, 2022, the liability for unrecognized tax benefits (excluding accrued interest and penalties) was approximately \$1.05 billion. Accrued interest and penalties related to unrecognized tax benefits as of July 1, 2022 was approximately \$254 million. Of these amounts, approximately \$1.16 billion could result in potential cash payments. With the exception of the tentative settlement, we are not able to provide a reasonable estimate of the timing of future tax payments related to these obligations.

During 2022, we and the IRS tentatively reached a settlement for resolving the statutory notices of deficiency and notices of proposed adjustments with respect to years 2008 through 2015 subject to the parties entering into final stipulations and a closing agreement. As a result, the trial originally scheduled to take place in May 2022 was cancelled. The tentative settlement for resolution incrementally increased the liability for unrecognized tax benefits, including interest and offsetting tax benefits, by \$324 million. Including this incremental increase, we expect to pay tax and interest totaling approximately \$600 million to \$700 million, which we expect to be partially offset by future reductions to our mandatory deemed repatriation tax obligations and tax savings from interest deductions aggregating to approximately \$100 to \$150 million. While we continue to work with the IRS to come to a final agreement on the federal tax and interest calculations, we are uncertain as to when a final agreement will be reached, and the exact timing of when any payments will be made. However, we believe it is reasonably likely that payments may be made within the next twelve months and have classified that portion of these unrecognized tax benefits, including interest, in Income taxes payable on our Consolidated Balance Sheet as of July 1, 2022. This classification and amount may be subject to change in the next twelve months depending on when we are able to reach a final agreement with the IRS.

Mandatory Research and Development Expense Capitalization

Beginning in 2023, the 2017 Act requires us to capitalize and amortize research and development expenses rather than expensing them in the year incurred, which is expected to result in materially higher cash tax payments, if not repealed or otherwise modified.

Interest Rate Risk

We have generally held a balance of fixed and variable rate debt. As of July 1, 2022, we had reduced the amount of variable rate debt to \$2.70 billion from \$5.43 billion as of July 2, 2021. As of July 1, 2022, a one percent increase in the variable rate of interest would increase annual interest expense by \$27 million. We currently have pay-fixed interest rate swaps of \$2.0 billion notional amount, which would mitigate the impact of fluctuations in variable interest rates through February 2023.

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 II, Item 8, Note 7, *Derivative Instruments and Hedging Activities*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

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 has authorized a stock repurchase program for the repurchase of up to \$5.00 billion of our common stock, which authorization is effective through July 25, 2023. For the year ended July 1, 2022, we did not make any stock repurchases and have not repurchased any shares of our common stock pursuant to our stock repurchase program since the first quarter of 2019. Although we will reevaluate the repurchasing of our common stock when appropriate, there can be no assurance if, when or at what level we may resume such activity. The remaining amount available to be repurchased under our current stock repurchase program as of July 1, 2022 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.

Cash Dividend

We issued a quarterly cash dividend from the first quarter of 2013 up to the third quarter of 2020. In April 2020, we suspended our dividend to reinvest in the business and to support our ongoing deleveraging efforts. We will reevaluate our dividend policy as our leverage ratio improves.

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 II, Item 8, Note 2, *Recent Accounting Pronouncements*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

We have prepared the accompanying 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 Consolidated Financial Statements may be material.

Revenue

We provide 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. We also provide resellers and OEMs with other sales incentive programs. The Company records estimated variable consideration related to these items as a reduction to revenue at the time of revenue recognition. We use judgment in our assessment of variable consideration in contracts to be included in the transaction price. We use the expected value method to arrive at the amount of variable consideration. The Company constrains variable consideration until the likelihood of a significant revenue reversal is not probable and believes that the expected value method is the appropriate estimate of the amount of variable consideration based on the fact that we have a large number of contracts with similar characteristics.

For sales to OEMs, the Company's methodology for estimating variable consideration is based on the amount of consideration expected to be earned based on the OEMs' volume of purchases from the Company or other agreed upon sales incentive programs. For sales to resellers, the methodology for estimating variable consideration is based on several factors including historical pricing information, current pricing trends and channel inventory levels. Estimating the impact of these factors requires significant judgment and differences between the estimated and actual amounts of variable consideration can be significant.

Inventories

We value inventories at the lower of cost (first-in, first-out) or net realizable value. We record inventory write-downs for the valuation of inventory at the lower of cost or net realizable value by analyzing market conditions and estimates of future sales prices as compared to inventory costs and inventory balances.

We evaluate inventory balances for excess quantities and obsolescence on a regular basis by analyzing estimated demand, inventory on hand, sales levels and other information and reduce inventory balances to net realizable value for excess and obsolete inventory based on this analysis. Unanticipated changes in technology or customer demand could result in a decrease in demand for one or more of our products, which may require a write down of inventory that could materially affect operating results. While adjustments to these reserves have generally not been material, in 2019, we recorded a charge to Cost of Sales of \$110 million primarily to reduce component inventory to net realizable value as a result of a sudden change in demand for certain products.

Income Taxes

We account for income taxes under the asset and liability method, which provides that deferred tax assets and liabilities be recognized for temporary differences between the financial reporting basis and the tax basis of our assets and liabilities and expected benefits of utilizing net operating loss and tax credit carryforwards. We record a valuation allowance when it is more likely than not that the deferred tax assets will not be realized. Each quarter, we evaluate the need for a valuation allowance for our deferred tax assets and we adjust the valuation allowance so that we record net deferred tax assets only to the extent that we conclude it is more likely than not that these deferred tax assets will be realized. We account for interest and penalties related to income taxes as a component of the provision for income taxes.

We recognize liabilities for uncertain tax positions based on a two-step process. To the extent a tax position does not meet a more-likely-than-not level of certainty, no benefit is recognized in the financial statements. If a position meets the more-likely-than-not level of certainty, it is recognized in the financial statements at the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. Interest and penalties related to unrecognized tax benefits are recognized on liabilities recorded for uncertain tax positions and are recorded in our provision for income taxes. The actual liability for unrealized tax benefits in any such contingency may be materially different from our estimates, which could result in the need to record additional liabilities for unrecognized tax benefits or potentially adjust previously-recorded liabilities for unrealized tax benefits and materially affect our operating results.

Goodwill

Goodwill is not amortized. Instead, it is tested for impairment on an annual basis or more frequently whenever events or changes in circumstances indicate that goodwill may be impaired. We perform our annual impairment test as of the first day of our fourth quarter for each reporting unit. We use qualitative factors to determine whether goodwill is more likely than not impaired and whether a quantitative test for impairment is considered necessary. If we conclude from the qualitative assessment that goodwill is more likely than not impaired, we are required to perform a quantitative approach to determine the amount of impairment. We are required to use judgment when applying the goodwill impairment test, including in the identification of our reporting units. We also make judgments and assumptions in the assignment of assets and liabilities to our reporting units, assignment of goodwill to reporting units and determination of the fair value of each reporting unit. In addition, the estimates used to determine the fair value of each of our reporting unit may change based on results of operations, macroeconomic conditions or other factors. Changes in these estimates could materially affect our assessment of the fair value and goodwill impairment for each reporting unit. If our stock price decreases significantly, goodwill could become impaired, which could result in a material charge and adversely affect our results of operations. Our recent assessments have indicated that fair value exceeds carrying value by a reasonable margin and we have not identified any impairment indicators for our reporting units.

Item 7A. 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 II, Item 8, Note 6, *Fair Value Measurements and Investments*, and Note 7, *Derivative Instruments and Hedging Activities*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Due to macroeconomic changes and volatility experienced in the foreign exchange market recently, we believe sensitivity analysis is more informative in representing the potential impact to the portfolio as a result of market movement. Therefore, we have performed sensitivity analyses for 2022 and 2021, using a modeling technique that measures the change in the fair values arising from a hypothetical 10% adverse movement in the levels of foreign currency exchange rates relative to the U.S. dollar, with all other variables held constant. The analyses cover all of our foreign currency derivative contracts used to offset the underlying exposures. The foreign currency exchange rates used in performing the sensitivity analyses were based on market rates in effect at July 1, 2022 and July 2, 2021. The sensitivity analyses indicated that a hypothetical 10% adverse movement in foreign currency exchange rates relative to the U.S. dollar would result in a foreign exchange fair value loss of \$306 million and \$183 million at July 1, 2022 and July 2, 2021, respectively.

During 2022, 2021 and 2020, total net realized and unrealized transaction and foreign exchange contract currency gains and losses were not material to our 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 Interest Rate Risk

Variable Interest Rate Risk

We have generally held a balance of fixed and variable rate debt. As of July 1, 2022, we had reduced the amount of variable rate debt to \$2.70 billion from \$5.43 billion as of July 2, 2021. As of July 2, 2022, our only variable rate debt outstanding was our Term Loan A-2 Loan, which bears interest, at the Company's option, at a per annum rate equal to either (x) the Adjusted Term Secured Overnight Financing Rate ("SOFR") (as defined in the Loan Agreement) plus an applicable margin varying from 1.125% to 2.000% or (y) a base rate plus an applicable margin varying from 0.125% to 1.000%, in each case depending on the corporate family ratings of the Company from at least two of Standard & Poor's Ratings Services, Moody's Investors Service, Inc. and Fitch Ratings, Inc., with an initial interest rate of Adjusted Term SOFR plus 1.375%.

As of July 1, 2022, a one percent increase in the variable rate of interest would increase annual interest expense by \$27 million. We currently have pay-fixed interest rate swaps of \$2.0 billion notional amount, which would mitigate the impact of fluctuations in variable interest rates noted above through February 2023.

For additional information regarding our variable interest rate debt, see Part II, Item 8, Note 8, *Debt*, of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors Western Digital Corporation:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Western Digital Corporation and subsidiaries (the Company) as of July 1, 2022 and July 2, 2021, the related consolidated statements of operations, comprehensive income (loss), cash flows and shareholders' equity for each of the years in the three-year period ended July 1, 2022, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of July 1, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of July 1, 2022 and July 2, 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended July 1, 2022, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of July 1, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A *Controls and Procedures - Management's Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Assessment of variable consideration for sales to resellers

As discussed in Note 1 to the consolidated financial statements, the Company provides resellers with price protection and 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's estimate of variable consideration for sales to resellers is based on several factors, including historical pricing information, current pricing trends, and channel inventory levels.

We identified the assessment of variable consideration for sales to resellers as a critical audit matter. Evaluating the assumptions used by the Company to estimate the variable consideration, specifically anticipated price decreases based on historical pricing information, current pricing trends, and channel inventory levels during the expected reseller holding period, required a higher degree of auditor judgment due to the uncertainty involved in the estimate.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's process of determining the variable consideration for sales to resellers, including controls related to the development of the assumption of anticipated price decreases during the reseller holding period. We evaluated the Company's ability to reasonably estimate the assumptions used to determine the variable consideration by comparing historically recorded variable consideration to actual subsequent payments and credits. We developed an expectation of the variable consideration for resellers based on historically recorded variable consideration, subsequent payments and credits issued and then compared our expectation to the actual variable consideration recorded.

Goodwill Re-allocation - Fair Value of the Reporting Units

As discussed in Notes 1 and 3 to the consolidated financial statements, historically, the Company had been managed and reported under a single operating segment. In 2021, the Chief Executive Officer, who is the Company's Chief Operating Decision Maker, announced a decision to reorganize the Company's business by forming two separate product business units: flash-based products (Flash) and hard disk drives (HDD). To align the new operating model and business structure, the Company made management organizational changes and implemented new reporting modules and processes to provide discrete information to manage the business. Effective July 3, 2021, the Company's management finalized its assessment of the Company's operating segments and concluded that the Company now has two operating segments: Flash and HDD. In connection with the Company's determination of its operating segments, effective July 3, 2021, the Company determined that its operating segments were also its reporting units and reallocated its goodwill between its reporting units based on the estimated relative fair values of the reporting units, with \$4,328 million allocated to the HDD reporting unit and \$5,738 million allocated to the Flash reporting unit.

We identified the assessment of the fair value of the reporting units as of July 3, 2021 as a critical audit matter. Subjective auditor judgment was required in assessing the forecasted revenue and forecasted cost of revenue assumptions used in the income approach to estimate the fair value of the reporting units. The assessment of these assumptions was challenging due to the degree of uncertainty related to the forecasted revenue and cost of revenue. Differences in judgment used to determine these assumptions could have a significant effect on the reporting units' estimated fair value and the resulting re-allocation of goodwill.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's process to estimate the

reporting units' fair value, including controls related to the determination of the forecasted revenue and forecasted cost of revenue assumptions for the reporting units. We evaluated the Company's forecasted revenue and cost of revenue assumptions by:

- comparing the forecasted revenue and cost of revenue to the Company's budget,
- comparing the forecasted revenue and cost of revenue to actual revenue and cost of revenue recorded subsequent to the measurement date,
- comparing the forecasted revenue growth rate to the actual revenue growth rate in prior years,
- comparing the forecasted cost of revenue to actual cost of revenue in prior years,
- comparing the forecasted revenue growth rate to the forecasted revenue growth rate projected for peer companies and the industry, as well as other economic data, and
- comparing the forecasted gross margin to historical gross margin for peer companies.

/s/ KPMG LLP

We have served as the Company's auditor since 1970.

Santa Clara, California August 24, 2022

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

	July 1, 2022			
ASSETS				
Current assets:				
Cash and cash equivalents	\$	2,327	\$	3,370
Accounts receivable, net		2,804		2,257
Inventories		3,638		3,616
Other current assets		684		514
Total current assets		9,453		9,757
Property, plant and equipment, net		3,670		3,188
Notes receivable and investments in Flash Ventures		1,396		1,586
Goodwill		10,041		10,066
Other intangible assets, net		213		442
Other non-current assets		1,486		1,093
Total assets	\$	26,259	\$	26,132
LIABILITIES AND SHAREHOLDERS' EQUITY	•			
Current liabilities:				
Accounts payable	\$	1,902	\$	1,934
Accounts payable to related parties		320		398
Accrued expenses		1,636		1,390
Income taxes payable		869		263
Accrued compensation		510		634
Current portion of long-term debt				251
Total current liabilities		5,237		4,870
Long-term debt		7,022		8,474
Other liabilities		1,779		2,067
Total liabilities		14,038		15,411
Commitments and contingencies (Notes 10, 11, 14 and 17)				
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 — 315 shares in 2022 and 312 shares in 2021; outstanding — 315 shares in 2022 and 308 shares in 2021		3		3
Additional paid-in capital		3,733		3,608
Accumulated other comprehensive loss		(554)		(197)
Retained earnings		9,039		7,539
Treasury stock — common shares at cost; 0 shares in 2022 and 4 shares in 2021				(232)
Total shareholders' equity		12,221		10,721
Total liabilities and shareholders' equity	\$	26,259	\$	26,132

WESTERN DIGITAL CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per share amounts)

	July 1, 2022	July 2, 2021	July 3, 2020
Revenue, net	\$ 18,793	\$ 16,922	\$ 16,736
Cost of revenue	 12,919	12,401	12,955
Gross profit	5,874	4,521	3,781
Operating expenses:			
Research and development	2,323	2,243	2,261
Selling, general and administrative	1,117	1,105	1,153
Employee termination, asset impairment, and other charges	 43	(47)	32
Total operating expenses	3,483	3,301	3,446
Operating income	2,391	1,220	335
Interest and other income (expense):			
Interest income	6	7	28
Interest expense	(304)	(326)	(413)
Other income, net	 30	26	4
Total interest and other expense, net	(268)	(293)	(381)
Income (loss) before taxes	2,123	927	(46)
Income tax expense	 623	106	204
Net income (loss)	\$ 1,500	\$ 821	\$ (250)
Income (loss) per common share			
Basic	\$ 4.81	\$ 2.69	\$ (0.84)
Diluted	\$ 4.75	\$ 2.66	\$ (0.84)
Weighted average shares outstanding:			, ,
Basic	312	305	298
Diluted	316	309	298
Cash dividends declared per share	\$ _	\$ —	\$ 1.50

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

	Year Ended						
		July 1, 2022		July 2, 2021		July 3, 2020	
Net income (loss)	\$	1,500	\$	821	\$	(250)	
Other comprehensive loss, before tax:							
Actuarial pension gain (loss)		26		27		(1)	
Foreign currency translation adjustment		(239)		(36)		(7)	
Net unrealized loss on derivative contracts		(180)		(33)		(93)	
Total other comprehensive loss, before tax		(393)		(42)		(101)	
Income tax benefit related to items of other comprehensive loss, before tax		36		2		12	
Other comprehensive loss, net of tax		(357)		(40)		(89)	
Total comprehensive income (loss)	\$	1,143	\$	781	\$	(339)	

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

(iii iiiiiioiis)	Year Ended							
		July 1, 2022		July 2, 2021		July 3, 2020		
Cash flows from operating activities				2021	_	2020		
Net income (loss)	\$	1,500	\$	821	\$	(250)		
Adjustments to reconcile net income (loss) to net cash provided by operations:								
Depreciation and amortization		929		1,212		1,566		
Stock-based compensation		326		318		308		
Deferred income taxes		114		(242)		(82)		
Gain on disposal of assets		(16)		(70)		(7)		
Gain on business divestiture		(9)		_		_		
Amortization of debt issuance costs and discounts		44		40		40		
Other non-cash operating activities, net		67		(6)		6		
Changes in:								
Accounts receivable, net		(546)		121		(1,175)		
Inventories		(22)		(546)		200		
Accounts payable		(129)		11		192		
Accounts payable to related parties		(78)		(9)		75		
Accrued expenses		246		257		103		
Income taxes payable		(74)		95		81		
Accrued compensation		(123)		162		124		
Other assets and liabilities, net		(349)		(266)		(357)		
Net cash provided by operating activities		1,880	_	1,898	_	824		
Cash flows from investing activities				,				
Purchases of property, plant and equipment		(1,122)		(1,146)		(647)		
Proceeds from the sale of property, plant and equipment		15		143		_		
Acquisitions, net of cash acquired		_		_		(22)		
Proceeds from dispositions of business		32		_				
Notes receivable issuances to Flash Ventures		(809)		(541)		(353)		
Notes receivable proceeds from Flash Ventures		718		772		1,284		
Strategic investments and other, net		(26)		7		16		
Net cash provided by (used in) investing activities		(1,192)		(765)		278		
Cash flows from financing activities			_	,	_			
Issuance of stock under employee stock plans		122		134		141		
Taxes paid on vested stock awards under employee stock plans		(90)		(56)		(72)		
Dividends paid to shareholders		_				(595)		
Repayment of government grants		_		(9)		_		
Repayment of debt		(3,621)		(886)		(982)		
Proceeds from debt		1,894		_		_		
Debt issuance costs		(23)		_		_		
Net cash used in financing activities		(1,718)		(817)	_	(1,508)		
Effect of exchange rate changes on cash		(13)		6		(1)		
Net increase (decrease) in cash and cash equivalents		(1,043)		322		(407)		
Cash and cash equivalents, beginning of year		3,370		3,048		3,455		
Cash and cash equivalents, end of year	\$	2,327	\$	3,370	\$	3,048		
Supplemental disclosure of cash flow information:								
Cash paid for income taxes	\$	423	\$	348	\$	341		
Cash paid for interest	\$	245	\$	283	\$	372		
Noncash exchange of Term Loan A-1 for Term Loan A-2	\$	2,104	\$	_	\$	_		
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WESTERN DIGITAL CORPORATION CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (in millions)

Balance at June 28, 2019 Net loss Employee stock plans	312 — — — — — — — — — — — — — — — — — — —	## Amount 3	Shares	Amount \$ (1,268) 531	Paid-In Capital \$ 3,851 — (462)	Comprehensive Income (Loss) \$ (68)	Retained Earnings \$ 7,449 (250)	Shareholders' Equity \$ 9,967 (250)
Net loss Employee stock plans	312 	\$ 3 ————————————————————————————————————				\$ (68) —	,	,
Employee stock plans	_ _ _ _			531		_	(250)	(250)
	_ _ _ _	_ _ _	7	531	(462)			` ′
	_ _ _	_ _	_			_	_	69
Adoption of new accounting standards	_	_		_	_	_	(5)	(5)
Stock-based compensation	_		_	_	308	_	_	308
Dividends to shareholders		_	_	_	20	_	(469)	(449)
Actuarial pension loss	_	_	_	_	_	(5)	_	(5)
Foreign currency translation adjustment	_	_	_	_	_	(6)	_	(6)
Net unrealized loss on derivative contracts						(78)		(78)
Balance at July 3, 2020	312	3	(10)	(737)	3,717	(157)	6,725	9,551
Net income	_	_	_	_	_	_	821	821
Adoption of new accounting standard	_	_	_	_	_	_	(7)	(7)
Employee stock plans	_	_	6	505	(427)	_	_	78
Stock-based compensation	_	_	_	_	318	_	_	318
Actuarial pension gain	_	_	_	_	_	23	_	23
Foreign currency translation adjustment	_	_	_	_	_	(36)	_	(36)
Net unrealized loss on derivative contracts						(27)		(27)
Balance at July 2, 2021	312	3	(4)	(232)	3,608	(197)	7,539	10,721
Net income	_	_	_	_	_	_	1,500	1,500
Employee stock plans	3	_	4	232	(201)	_	_	31
Stock-based compensation	_	_	_	_	326	_	_	326
Actuarial pension gain	_	_	_	_	_	24	_	24
Foreign currency translation adjustment	_	_	_	_	_	(239)	_	(239)
Net unrealized loss on derivative contracts						(142)		(142)
Balance at July 1, 2022	315	\$ 3		<u>\$</u>	\$ 3,733	\$ (554)	\$ 9,039	\$ 12,221

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 ("IT") industry and the infrastructure that enables the proliferation of data in virtually every other industry. The Company creates environments for data to thrive. The Company is driving the innovation needed to help customers capture, preserve, access and transform an ever-increasing diversity of data. Everywhere data lives, from advanced data centers to mobile sensors to personal devices, the Company's industry-leading solutions deliver the possibilities of data.

The Company's broad portfolio of technology and products address the following key end markets: Cloud, Client and Consumer. The Company also generates immaterial license and royalty revenue from its extensive intellectual property ("IP") portfolio, which is included in each of these three end market categories.

Basis of Presentation

The Company has prepared its Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and has adopted accounting policies and practices which are generally accepted in the industry in which it operates. The Company's significant accounting policies are summarized below.

Reclassifications

Certain reclassifications have been made to prior period amounts in the Consolidated Financial Statements to conform to the current period presentation. These reclassifications did not have a material impact on previously reported amounts.

Fiscal Year

The Company's fiscal year ends on the Friday nearest to June 30 and typically consists of 52 weeks. Approximately every five to six years, we report a 53-week fiscal year to align the fiscal year with the foregoing policy. Fiscal years 2022 and 2021, which ended on July 1, 2022 and July 2, 2021, respectively, are comprised of 52 weeks, with all quarters presented consisting of 13 weeks. Fiscal year 2020, which ended on July 3, 2020, was comprised of 53 weeks, with the first quarter consisting of 14 weeks and the remaining quarters consisting of 13 weeks each. Unless otherwise indicated, references herein to specific years and quarters are to fiscal years and fiscal quarters, and references to financial information are on a consolidated basis.

Segment Reporting

The Company manufactures, markets, and sells data storage devices and solutions in the U.S. and in foreign countries through its sales personnel, dealers, distributors, retailers, and subsidiaries. Historically, the Company had been managed and reported under a single operating segment. In 2021, the Chief Executive Officer, who is the Company's Chief Operating Decision Maker ("CODM"), announced a decision to reorganize the Company's business by forming two separate product business units: flash-based products ("Flash") and hard disk drives ("HDD"). To align the new operating model and business structure, the Company made management organizational changes and implemented new reporting modules and processes to provide discrete information to manage the business. Effective July 3, 2021, the Company's management finalized its assessment of the Company's operating segments and concluded that the Company now has two operating segments: flash-based products and hard disk drives.

The CODM evaluates performance of the Company and makes decisions regarding allocation of resources based on each operating segment's net revenue and gross margin. Because of the integrated nature of the Company's production and distribution activities, separate segment asset measures are either not available or not used as a basis for the CODM to evaluate the performance of or to allocate resources to the segments.

Basis of Consolidation

The Consolidated Financial Statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The functional currency of most of the Company's foreign subsidiaries is the U.S. dollar. The accounts of these foreign subsidiaries have been remeasured using the U.S. dollar as the functional currency. Gains or losses resulting from remeasurement of these accounts from local currencies into U.S. dollars were immaterial to the Consolidated Financial Statements. Financial statements of the Company's foreign subsidiaries for which the functional currency is the local currency are translated into U.S. dollars using the exchange rate at each balance sheet date for assets and liabilities and a weighted average exchange rate for each period for statement of operations items. Translation adjustments are recorded in accumulated other comprehensive income, a component of shareholders' equity.

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 with consideration given to the potential impacts of the ongoing COVID-19 pandemic. However, actual results could differ materially from these estimates.

Cash Equivalents

The Company's cash equivalents represent highly liquid investments in money market funds, which are invested in U.S. Treasury securities and U.S. Government agency securities as well as bank certificates of deposit with original maturities at purchase of three months or less. These deposits are typically in excess of U.S. insured limits. Cash equivalents are carried at cost plus accrued interest, which approximates fair value.

Equity Investments

The Company enters into certain strategic investments for the promotion of business and strategic objectives. The equity method of accounting is used if the Company's ownership interest is greater than or equal to 20% but less than a majority or where the Company has the ability to exercise significant influence over operating and financial policies. The Company's equity in the earnings or losses in equity-method investments is recognized in Other income, net, in the Consolidated Statements of Operations.

If the Company's ownership interest is less than 20% and the Company does not have the ability to exercise significant influence over operating and financial policies of the investee, the Company accounts for these investments at fair value, or if these equity securities do not have a readily determinable fair value, these securities are measured and recorded using the measurement alternative under Accounting Standards Update ("ASU") No. 2016-01, "Financial Instruments — Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities," which is cost minus impairment, if any, plus or minus changes resulting from observable price changes. Previously, these investments were accounted for under the cost method of accounting. These investments are recorded within Other non-current assets in the Consolidated Balance Sheets and are periodically analyzed to determine whether or not there are indicators of impairment.

Variable Interest Entities

The Company evaluates its investments and other significant relationships to determine whether any investee is a variable interest entity ("VIE"). If the Company concludes that an investee is a VIE, the Company evaluates its power to direct the activities of the investee, its obligation to absorb the expected losses of the investee and its right to receive the expected residual returns of the investee to determine whether the Company is the primary beneficiary of the investee. If the Company is the primary beneficiary of a VIE, the Company consolidates such entity and reflects the non-controlling interest of other beneficiaries of that entity. The Company does not consolidate any cost method investment or equity method investment entities.

Fair Value of Financial Instruments

The carrying amounts of cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value for all periods presented because of the short-term maturity of these assets and liabilities. The fair value of investments that are not accounted for under the equity method is based on appropriate market information.

Inventories

The Company values inventories at the lower of cost (first-in, first out) or net realizable value. The first-in, first-out method is used to value the cost of the majority of the Company's inventories. Inventory write-downs are recorded for the valuation of inventory at the lower of cost or net realizable value by analyzing market conditions and estimates of future sales prices as compared to inventory costs and inventory balances.

The Company evaluates inventory balances for excess quantities and obsolescence on a regular basis by analyzing estimated demand, inventory on hand, sales levels and other information and reduces inventory balances to net realizable value for excess and obsolete inventory based on this analysis. Unanticipated changes in technology or customer demand could result in a decrease in demand for one or more of the Company's products, which may require a write down of inventory that could materially affect operating results.

Property, Plant and Equipment

Property and equipment are carried at cost less accumulated depreciation and amortization. The cost of property, plant and equipment is depreciated over the estimated useful lives of the respective assets. The Company's buildings and improvements are depreciated over periods ranging from fifteen to thirty years. The majority of the Company's machinery and equipment, software, and furniture and fixtures, are depreciated on a straight-line basis over a period of two to seven years. Leasehold improvements are amortized over the lesser of the estimated useful lives of the assets or the related lease terms.

Business Combinations

The application of acquisition accounting to a business combination requires that the Company identify the individual assets acquired and liabilities assumed and estimate the fair value of each. The fair value of assets acquired and liabilities assumed in a business acquisition are recognized at the acquisition date using a combination of valuation techniques, with the purchase price exceeding the fair values being recognized as goodwill. Determining fair value of identifiable assets, particularly intangibles, liabilities acquired and contingent obligations assumed requires management to make estimates. In certain circumstances, the allocations of the excess purchase price are based upon preliminary estimates and assumptions and subject to revision when the Company receives final information, including appraisals and other analyses. Accordingly, the measurement period for such purchase price allocations will end when the information, or the facts and circumstances, becomes available, but will not exceed twelve months. The Company will recognize measurement-period adjustments during the period of resolution, including the effect on earnings of any amounts that would have been recorded in previous periods if the accounting had been completed at the acquisition date.

Goodwill and intangible assets often represent a significant portion of the assets acquired in a business combination. The Company recognizes the fair value of an acquired intangible apart from goodwill whenever the intangible arises from contractual or other legal rights, or when it can be separated or divided from the acquired entity and sold, transferred, licensed, rented or exchanged, either individually or in combination with a related contract, asset or liability. Intangible assets consist primarily of technology, customer relationships, and trade name and trademarks acquired in business combinations and inprocess research and development ("IPR&D"). The Company's assessment of IPR&D also includes consideration of the risk of the projects not achieving technological feasibility.

Goodwill and Other Long-Lived Assets

Goodwill is not amortized. Instead, it is tested for impairment on an annual basis or more frequently whenever events or changes in circumstances indicate that goodwill may be impaired. The Company performs an annual impairment test as of the beginning of its fourth quarter. The Company uses qualitative factors to determine whether goodwill is more likely than not impaired and whether a quantitative test for impairment is considered necessary. If the Company concludes from the qualitative assessment that goodwill is more likely than not impaired, the Company is required to perform a quantitative approach to determine the amount of impairment. The Company's assessment resulted in no impairment of goodwill in 2022, 2021, or 2020.

The Company is required to use judgment when applying the goodwill impairment test, including the identification of reporting units, assignment of assets, liabilities and goodwill to reporting units, and determination of the fair value of each reporting unit. In addition, the estimates used to determine the fair value of reporting units may change based on results of operations, macroeconomic conditions or other factors. Changes in these estimates could materially affect the Company's assessment of the fair value and goodwill impairment. If the Company's stock price decreases significantly, goodwill could become impaired, which could result in a material charge and adversely affect the Company's results of operations.

IPR&D is an intangible asset accounted as an indefinite-lived asset until the completion or abandonment of the associated research and development effort. During the development period, the Company conducts an IPR&D impairment test annually and whenever events or changes in facts and circumstances indicate that it is more likely than not that the IPR&D is impaired. Events which might indicate impairment include, but are not limited to, adverse cost factors, strategic decisions made in response to economic, market, and competitive conditions, and the impact of the economic environment the Company and on its customer base. If impairment is indicated, the impairment is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets.

Other long-lived assets are depreciated or amortized over their estimated useful lives based on the pattern in which the economic benefits are expected to be received. Long-lived assets are tested for recoverability whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. If impairment is indicated, the impairment is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. The estimates of fair value require evaluation of future market conditions and product lifecycles as well as projected revenue, earnings and cash flow. See Note 5, *Supplemental Financial Statement Data*, for additional disclosures related to the Company's other intangible assets.

Revenue and Accounts Receivable

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 professional service arrangements and 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 two 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. The Company also provides resellers and original equipment manufacturers ("OEMs") with other sales incentive programs. The Company records estimated variable consideration related to these items as a reduction to revenue at the time of revenue recognition. 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 constrains variable consideration until the likelihood of a significant revenue reversal is not probable and believes 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.

For sales to OEMs, the Company's methodology for estimating variable consideration is based on the amount of consideration expected to be earned based on the OEMs' volume of purchases from the Company or other agreed upon sales incentive programs. For sales to resellers, the Company's methodology for estimating variable consideration is based on several factors including historical pricing information, current pricing trends and channel inventory levels. Differences between the estimated and actual amounts of variable consideration are recognized as adjustments to revenue.

Marketing development program costs are typically recorded as a reduction of the transaction price and, therefore, of revenue. The Company nets sales rebates against open customer receivable balances if the criteria to offset are met, otherwise they are recorded within other accrued liabilities.

For contracts with multiple performance obligations, 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. If applicable, 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.

The Company records an allowance for doubtful accounts by analyzing specific customer accounts and assessing the risk of loss based on insolvency or other collection issues. In addition, the Company routinely analyzes the various receivable aging categories to establish reserves based on a combination of past due receivables and expected future losses. If the financial condition of a significant customer deteriorates resulting in its inability to pay its accounts when due, or if the Company's overall loss trajectory changes significantly, an adjustment in the Company's allowance for doubtful accounts would be required, which could materially affect operating results.

Warranty

The Company records an accrual for estimated warranty costs when revenue is recognized. The Company generally warrants its products for a period of one to five years, with a small number of products having a warranty ranging up to ten years or more. The warranty provision considers estimated product failure rates and trends, estimated replacement costs, estimated repair costs which include scrap costs and estimated costs for customer compensatory claims related to product quality issues, if any. For warranties ten years or greater, including lifetime warranties, the Company uses the estimated useful life of the product to calculate the warranty exposure. A statistical warranty tracking model is used to help prepare estimates and assist the Company in exercising judgment in determining the underlying estimates. The statistical tracking model captures specific detail on product reliability, such as factory test data, historical field return rates and costs to repair by product type. Management's judgment is subject to a greater degree of subjectivity with respect to newly introduced products because of limited field experience with those products upon which to base warranty estimates. Management reviews the warranty accrual quarterly for products shipped in prior periods and which are still under warranty. Any changes in the estimates underlying the accrual may result in adjustments that impact current period gross profit and income. Such changes are generally a result of differences between forecasted and actual return rate experience and costs to repair and could differ significantly from the estimates.

Litigation and Other Contingencies

When the Company becomes aware of a claim or potential claim, the Company assesses the likelihood of any loss or exposure. The Company discloses information regarding each material claim where the likelihood of a loss contingency is probable or reasonably possible. If a loss contingency is probable and the amount of the loss can be reasonably estimated, the Company records an accrual for the loss. In such cases, there may be an exposure to potential loss in excess of the amount accrued. Where a loss is not probable but is reasonably possible or where a loss in excess of the amount accrued is reasonably possible, the Company discloses an estimate of the amount of the loss or range of possible losses for the claim if a reasonable estimate can be made, unless the amount of such reasonably possible losses is not material to the Company's financial position, results of operations or cash flows. 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. See Note 17, *Legal Proceedings*, for additional disclosures related to the Company's litigation.

Advertising Expense

Advertising costs are expensed as incurred and amounted to \$88 million, \$84 million and \$93 million in 2022, 2021 and 2020, respectively. These expenses are included in Selling, general and administrative in the Consolidated Statements of Operations.

Research and Development Expense

Research and development ("R&D") expenditures are expensed as incurred.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which provides that deferred tax assets and liabilities be recognized for temporary differences between the financial reporting basis and the tax basis of assets and liabilities and expected benefits of utilizing net operating loss ("NOL") and tax credit carryforwards. The Company records a valuation allowance when it is more likely than not that the deferred tax assets will not be realized. Each quarter, the Company evaluates the need for a valuation allowance for its deferred tax assets and adjusts the valuation allowance so that the Company records net deferred tax assets only to the extent that it has concluded it is more likely than not that these deferred tax assets will be realized. The Company accounts for interest and penalties related to income taxes as a component of the provision for income taxes.

The Company recognizes liabilities for uncertain tax positions based on a two-step process. To the extent a tax position does not meet a more-likely-than-not level of certainty, no benefit is recognized in the financial statements. If a position meets the more-likely-than-not level of certainty, it is recognized in the financial statements at the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. Interest and penalties related to unrecognized tax benefits are recognized in liabilities recorded for uncertain tax positions and are recorded in the provision for income taxes. The actual liability for unrealized tax benefits in any such contingency may be materially different from the Company's estimates, which could result in the need to record additional liabilities for unrecognized tax benefits or potentially adjust previously-recorded liabilities for unrealized tax benefits, and may materially affect the Company's operating results.

Income per Common Share

The Company computes basic income per common share using net income and the weighted average number of common shares outstanding during the period. Diluted income per common share is computed using net income 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, restricted stock unit awards ("RSU"), restricted stock unit awards with performance conditions or market conditions ("PSU"), rights to purchase shares of common stock under the Company's Employee Stock Purchase Plan ("ESPP") and shares issuable in connection with convertible debt.

Stock-based Compensation

The Company accounts for all stock-based compensation at fair value. Stock-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. The fair values of RSUs and PSUs with a performance condition are determined based on the closing market price of the Company's stock on the date of the grant. The fair values of all ESPP purchase rights are estimated using the Black-Scholes-Merton option-pricing model and require the input of highly subjective assumptions. The fair values of PSUs with a market condition are estimated using a Monte Carlo simulation model. PSUs are granted to certain employees and vest only after the achievement of pre-determined performance or market conditions. Once these conditions are met, vesting of PSUs is subject to continued service by the employee. At the end of each reporting period, the Company evaluates the probability that PSUs with a performance condition will be earned and records the related stock-based compensation expense over the service period. Compensation expense for PSUs with market conditions is recognized ratably over the required service period regardless of expected or actual achievement.

Other Comprehensive Income (Loss), Net of Tax

Other comprehensive income (loss), net of tax refers to revenue, expenses, gains and losses that are recorded as an element of shareholders' equity but are excluded from net income. The Company's other comprehensive income (loss), net of tax is primarily comprised of unrealized gains or losses on foreign exchange contracts and interest rate swap agreements designated as cash flow hedges, foreign currency translation, and actuarial gains or losses related to pensions.

Derivative Contracts

The majority of the Company's transactions are in U.S. dollars; however, some transactions are based in various foreign currencies. The Company purchases foreign exchange contracts to hedge the impact of foreign currency exchange fluctuations on certain underlying assets, liabilities and commitments for Operating expenses and product costs denominated in foreign currencies. The purpose of entering into these hedging transactions is to minimize the impact of foreign currency fluctuations on the Company's results of operations. Substantially all of these contract maturity dates do not exceed 12 months. All foreign exchange contracts are for risk management purposes only. The Company does not purchase foreign exchange contracts for speculative or trading purposes. The Company had foreign exchange contracts with commercial banks for British pound sterling, European euro, Japanese yen, Malaysian ringgit, Philippine peso, Thai baht, Korean won and Israeli shekel, which had an aggregate notional amount of \$6.07 billion and \$4.88 billion at July 1, 2022 and July 2, 2021, respectively.

If the derivative is designated as a cash flow hedge and is determined to be highly effective, the change in fair value of the derivative is initially deferred in Other comprehensive income (loss), net of tax. These amounts are subsequently recognized into earnings when the underlying cash flow being hedged is recognized into earnings. Recognized gains and losses on foreign exchange contracts are reported in Cost of revenue and Operating expenses, and presented within cash flows from operating activities. The Company accounts for its interest rate swaps as designated cash flow hedges to mitigate variations in interest payments under a portion of its Secured Overnight Financing Rate ("SOFR")-based term loans. The Company pays interest monthly at a fixed rate and receives interest monthly at the SOFR on the notional amount of the contract with realized gains or losses recognized in Interest expense. Hedge effectiveness is measured by comparing the hedging instrument's cumulative change in fair value from inception to maturity to the underlying exposure's terminal value. The Company determined the ineffectiveness associated with its cash flow hedges to be immaterial to the Consolidated Financial Statements for all years presented.

A change in the fair value of undesignated hedges is recognized in earnings in the period incurred and is reported in Other income, net.

Pensions and Other Post-Retirement Benefit Plans

The Company has defined benefit pension plans and other post-retirement plans covering certain employees in various countries. The benefits are based on the employees' years of service and compensation. The plans are funded in conformity with the funding requirements of applicable government authorities. The Company amortizes unrecognized actuarial gains and losses and prior service costs on a straight-line basis over the remaining estimated average service life of the participants. The measurement date for the plans is the Company's year-end. The Company recognizes the funded status of its defined benefit pension and post-retirement plans in the Consolidated Balance Sheets, with actuarial changes in the funded status recognized through accumulated other comprehensive income (loss) in the year in which such changes occur.

The Company reports 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 presented in Other income, net in the Consolidated Statements of Operations.

Leases

Effective June 29, 2019, the first day of the year ended July 3, 2020, the Company adopted ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02") which resulted in an after-tax decrease to opening retained earnings of \$5 million for the cumulative effect of adoption, primarily due to previously recorded sublease proceed assumptions on lease exit liabilities for which there was no expected future economic benefit at transition. The Company leases certain domestic and international facilities and data center space under long-term, non-cancelable operating leases that expire at various dates through 2034. These leases include no material variable or contingent lease payments. Operating lease assets and liabilities are recognized based on the present value of the remaining lease payments discounted using the Company's incremental borrowing rate. Operating lease assets also include prepaid lease payments minus any lease incentives. Extension or termination options present in the Company's lease agreements are included in determining the right-of-use asset and lease liability when it is reasonably certain the Company will exercise that option. Lease expense is recognized on a straight-line basis over the lease term.

Note 2. Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes" ("ASU 2019-12"). ASU 2019-12 removes certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. The Company adopted this ASU on July 3, 2021, the first day of the year ended July 1, 2022, with no material impact on its Consolidated Financial Statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In August 2020, the FASB issued ASU No. 2020-06, "Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity" ("ASU 2020-06"). ASU 2020-06 reduces the number of accounting models for convertible debt instruments and convertible preferred stock and results in fewer instruments with embedded conversion features being separately recognized from the host contract as compared with current standards. Those instruments that do not have a separately recognized embedded conversion feature will no longer recognize a debt issuance discount related to such a conversion feature and would recognize less interest expense on a periodic basis. Additionally, the ASU amends the calculation of the share dilution impact related to a conversion feature and eliminates the treasury method as an option. The Company adopted the new standard effective July 2, 2022, the first day of the year ending June 30, 2023, using the modified retrospective method. On the date of adoption, the Company recorded a reduction in Additional Paid-In Capital of \$128 million, a reduction of unamortized debt discount of \$48 million, a reduction of deferred income tax liabilities of \$11 million, and an increase to retained earnings of \$91 million retained earnings for 2023 for the after-tax impact of previously recognized amortization of the debt discount associated with the Company's convertible senior notes.

In November 2021, the FASB issued ASU No. 2021-10, "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance" ("ASU 2021-10"). ASU 2021-10 increases the transparency of government assistance received by requiring most business entities to disclose information about government assistance received, including (1) the types of assistance, (2) the entity's accounting for the assistance, and (3) the effect of the assistance on an entity's financial statements. This ASU is effective for fiscal years (and interim periods within those fiscal years) beginning after December 15, 2021, which for the Company is the first quarter of 2023. Early adoption is permitted. The Company expects to adopt this standard in the first quarter of 2023 and does not expect any material impact from the adoption of this standard.

Note 3. Business Segments, Geographic Information, and Concentrations of Risk

The following table summarizes the operating performance of the Company's reportable segments:

	2022		2021		2020	
	(in mil			entages)		
Net revenue:						
Flash	\$ 9,753	\$	8,706	\$	7,769	
HDD	 9,040		8,216		8,967	
Total net revenue	\$ 18,793	\$	16,922	\$	16,736	
Gross profit:						
Flash	\$ 3,527	\$	2,611	\$	1,903	
HDD	 2,661		2,221		2,602	
Total gross profit for segments	 6,188		4,832		4,505	
Unallocated corporate items:						
Amortization of acquired intangible assets	(66)		(331)		(610)	
Stock-based compensation expense	(48)		(55)		(51)	
Contamination related charges	(207)		_		_	
Recoveries from a power outage incident	7		75		(68)	
Other	 _		_		5	
Total unallocated corporate items	(314)		(311)		(724)	
Consolidated gross profit	\$ 5,874	\$	4,521	\$	3,781	
Gross margin:						
Flash	36.2 %		30.0 %		24.5 %	
HDD	29.4 %		27.0 %		29.0 %	
Consolidated gross margin	31.3 %		26.7 %		22.6 %	

Goodwill

In connection with the Company's determination of its operating segments, effective July 3, 2021, the Company determined that its operating segments were also its reporting units and re-allocated its goodwill between its reporting units based on the estimated relative fair values of the reporting units. In addition, management performed a goodwill impairment assessment for each segment and concluded there were no impairment indicators as of July 1, 2022.

In May 2022, the Company made a decision to exit its RISC-V development operations and completed the sale of the portion of its business for a price of \$25 million. The sale of this business included the transfer of a small number of employees and an immaterial amount of other tangible and intangible assets as well as goodwill. The transaction resulted in a gain of approximately \$9 million recorded in Employee termination, asset impairment, and other charges in the Consolidated Statements of Operations for the fiscal year ended July 1, 2022. The revenues and expenses related to this business were not material to the Consolidated Financial Statements and did not qualify to be reported as a discontinued operation. The operating results of this business have been reflected in the Company's results from continuing operations in the Consolidated Statements of Operations for all periods presented through the date of disposition.

The following table provides a summary of goodwill activity for the period:

	1	Flash	HDD		Total
		(in millio			
Balance at July 2, 2021	\$	5,738	\$	4,328	\$ 10,066
Reduction in goodwill in connection with disposition of business		(14)		_	(14)
Foreign currency translation adjustment		(6)		(5)	 (11)
Balance at July 1, 2022	\$	5,718	\$	4,323	\$ 10,041

Disaggregated Revenue

The Company's broad portfolio of technology and products address multiple end markets. In 2022, the Company refined the end markets it reports to be Cloud, Client and Consumer. Cloud represents a large and growing end market comprised primarily of products for public or private cloud environments and enterprise customers, which the Company believes it is uniquely positioned to address as the only provider of both Flash and HDD. Through the Client end market, the Company provides its OEM and channel customers a broad array of high-performance flash and hard drive solutions across personal computer, mobile, gaming, automotive, virtual reality headsets, at-home entertainment, and industrial spaces. The Consumer end market is highlighted by the Company's broad range of retail and other end-user products, which capitalize on the strength of the Company's product brand recognition and vast points of presence around the world.

The Company's disaggregated revenue information is as follows:

	 2022	2021			2020
	(in millions)				
Revenue by End Market					
Cloud	\$ 8,017	\$	5,723	\$	7,018
Client	7,076		7,281		6,335
Consumer	 3,700		3,918		3,383
Total Revenue	\$ 18,793	\$	16,922	\$	16,736

The Company's operations outside the United States include manufacturing facilities in China, Japan, Malaysia, the Philippines and Thailand, as well as sales offices throughout the Americas, Asia Pacific, Europe and the Middle East. The following tables summarize the Company's operations by geographic area:

	2022		2021	 2020
			(in millions)	
Net revenue (1)				
United States	\$	5,411	\$ 3,789	\$ 4,679
China		4,525	4,339	4,075
Hong Kong		3,645	3,624	2,592
Rest of Asia		1,884	1,492	1,699
Europe, Middle East and Africa		2,872	3,061	2,926
Other		456	617	765
Total	\$	18,793	\$ 16,922	\$ 16,736

Net revenue is attributed to geographic regions based on the ship-to location of the customer. License and royalty revenue is attributed to countries based upon the location of the headquarters of the licensee.

	2022		2021
	 (in mi	llions)	
Long-lived assets (1)			
United States	\$ 1,130	\$	1,068
Malaysia	831		632
China	441		395
Thailand	816		651
Rest of Asia	406		398
Europe, Middle East and Africa	 46		44
Total	\$ 3,670	\$	3,188

Long-lived assets include property, plant and equipment and are attributed to the geographic location in which they are located.

Customer Concentration and Credit Risk

The Company sells its products to computer manufacturers and OEMs, cloud service providers, resellers, distributors and retailers throughout the world. For each of 2022, 2021 and 2020, no customer accounted for 10% or more of the Company's net revenue. For 2022, 2021 and 2020, the Company's top 10 customers accounted for 45%, 39%, and 42% respectively, of the Company's net revenue.

The Company performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral. The Company maintains allowances for potential credit losses, and such losses have historically been within management's expectations. At any given point in time, the total amount outstanding from any one of a number of its customers may be individually significant to the Company's financial results. As of July 1, 2022, the Company had net accounts receivable of \$2.8 billion, and no customer accounted for 10% or more of the Company's outstanding accounts receivable. As of July 2, 2021, the Company had net accounts receivable of \$2.3 billion, and one customer, Kingston Technology Company, accounted for 12% of the Company's net accounts receivable. Reserves for potential credit losses were not material as of each period end.

The Company also has cash equivalent and investment policies that limit the amount of credit exposure to any one financial institution or investment instrument and requires that investments be made only with financial institutions or in investment instruments evaluated as highly credit-worthy.

Supplier Concentration

All of the Company's Flash require silicon wafers for the memory and controller components. The Company's flash memory wafers are currently supplied almost entirely from Flash Ventures (as defined in Note 10) and the Company's controller wafers are all manufactured by third-party sources. The failure of any of these sources to deliver silicon wafers could have a material adverse effect on the Company's business, financial condition and results of operations.

In addition, some key components are purchased from single source vendors for which alternative sources are currently not available. Shortages could occur in these essential materials due to an interruption of supply or increased demand in the industry. If the Company was unable to procure certain of such materials, the Company's sales could decline, which could have a material adverse effect upon its results of operations. The Company also relies on third-party subcontractors to assemble and test a portion of its products. The Company does not have long-term contracts with some of these subcontractors and cannot directly control product delivery schedules or manufacturing processes. This could lead to product shortages or quality assurance problems that could increase the manufacturing costs of the Company's products and have material adverse effects on the Company's operating results.

Note 4. Revenues

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 July 1, 2022 or July 2, 2021. Contract liabilities relate to customers' payments in advance of performance under the contract and primarily relate to remaining performance obligations under professional service and support and maintenance contracts. Contract liabilities as of July 1, 2022 and July 2, 2021 and changes in contract liabilities during 2022 and 2021 were not material.

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. The Company had no direct incremental costs to obtain contracts that have an expected benefit of greater than one year.

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, professional service 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 July 1, 2022 was \$45 million, which is mainly attributable to the functional IP license and professional service arrangements. The Company expects to recognize this amount as revenue as follows: \$43 million in 2023, and \$2 million in 2024 and thereafter.

Note 5. 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. In 2022, 2021 and 2020, the Company sold trade accounts receivable and received cash proceeds of \$400 million, \$233 million and \$411 million, respectively. The discounts on the trade accounts receivable sold during the periods were not material and were recorded within Other income, net in the Consolidated Statements of Operations. As of July 1, 2022 and July 2, 2021, the amount of factored receivables that remained outstanding was \$300 million and \$0 million, respectively.

Inventories

	_	July 1, 2022		July 2, 2021		
		(in millions)				
Inventories:						
Raw materials and component parts	\$	1,603	\$	1,623		
Work-in-process		1,162		1,088		
Finished goods		873		905		
Total inventories	\$	3,638	\$	3,616		

Property, plant and equipment, net

	July 1, 2022		July 2, 2021
	 (in mi	llions)	
Property, plant and equipment:			
Land	\$ 269	\$	278
Buildings and improvements	1,920		1,854
Machinery and equipment	8,642		7,860
Computer equipment and software	494		440
Furniture and fixtures	54		51
Construction-in-process	 591		476
Property, plant and equipment, gross	 11,970		10,959
Accumulated depreciation	 (8,300)		(7,771)
Property, plant and equipment, net	\$ 3,670	\$	3,188

Depreciation expense for property, plant and equipment totaled \$708 million, \$726 million and \$797 million in 2022, 2021 and 2020, respectively.

Intangible assets

Total finite intangible assets

Total intangible assets

In-process research and development

The following tables present intangible assets as of July 1, 2022 and July 2, 2021:

	Weighted Average Amortization Period	G	ross Carrying Amount	Accumulated Amortization	N	Net Carrying Amount
	(in years)	(in years)		(in millions)		
Finite:						
Existing technology	3	\$	4,231	\$ (4,231)	\$	_
Trade names and trademarks	7		648	(573)		75
Customer relationships	6		613	(555)		58
Leasehold interests	31		1	(1)		_

July 1, 2022

5,493

5,573

80

(5,360)

(5,360)

133

80

213

		July 2, 2021							
	Weighted Average Amortization Period	G	ross Carrying Amount		Accumulated Amortization		t Carrying Amount		
	(in years)			(in millions)					
Finite:									
Existing technology	3	\$	4,231	\$	(4,165)	\$	66		
Trade names and trademarks	7		647		(486)		161		
Customer relationships	6		618		(491)		127		
Leasehold interests	31		12		(4)		8		
Total finite intangible assets			5,508		(5,146)		362		
In-process research and development			80				80		
Total intangible assets		\$	5,588	\$	(5,146)	\$	442		

As part of prior acquisitions, the Company recorded at the time of the acquisition acquired 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.

During 2022, 2021 and 2020, the Company did not record any impairment charges related to intangible assets.

Intangible assets are amortized over the estimated useful lives based on the pattern in which the economic benefits are expected to be received. Intangible asset amortization was as follows:

	2	2022	2021		2020
			(in millions,)	·
Intangible asset amortization	\$	221	\$	486 \$	769

The remaining \$133 million estimated future amortization expense for intangible assets currently subject to amortization as of July 1, 2022, will be fully recognized in 2023.

$\label{thm:corporation} WESTERN \ DIGITAL \ CORPORATION \\ NOTES \ TO \ CONSOLIDATED \ FINANCIAL \ STATEMENTS \ — \ (Continued)$

Product warranty liability

Changes in the warranty accrual were as follows:

	 2022		2021		2020
		(i	n millions)		
Warranty accrual, beginning of period	\$ 363	\$	408	\$	350
Charges to operations	146		137		203
Utilization	(103)		(106)		(151)
Changes in estimate related to pre-existing warranties	 (61)		(76)		6
Warranty accrual, end of period	\$ 345	\$	363	\$	408

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:

	2022		2	021
	(in millions)			
Warranty accrual				
Current portion (included in Accrued expenses)	\$	162	\$	175
Long-term portion (included in Other liabilities)		183		188
Total warranty accrual	\$	345	\$	363

Other liabilities

		2022		2021	
	(in millions)				
Other liabilities:					
Non-current net tax payable	\$	659	\$	684	
Non-current portion of unrecognized tax benefits		477		750	
Other non-current liabilities		643		633	
Total other liabilities	\$	1,779	\$	2,067	

Accumulated other comprehensive income (loss)

Accumulated other comprehensive income (loss) ("AOCI"), 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 AOCI:

	Actuarial Pension Gains (Losses)	Foreign Currency Translation Adjustment	Unrealized Gains (Losses) on Derivative Contracts	Total Accumulated Comprehensive Income (Loss)
		(in mi	illions)	
Balance at July 3, 2020	\$ (58)	\$ (2)	\$ (97)	\$ (157)
Other comprehensive income (loss) before reclassifications	27	(36)	42	33
Amounts reclassified from accumulated other comprehensive loss	_	_	(75)	(75)
Income tax benefit (expense) related to items of other comprehensive loss	(4)		6	2
Net current-period other comprehensive income (loss)	23	(36)	(27)	(40)
Balance at July 2, 2021	(35)	(38)	(124)	(197)
Other comprehensive income (loss) before reclassifications	26	(239)	(352)	(565)
Amounts reclassified from accumulated other comprehensive income (loss)	_	_	172	172
Income tax benefit (expense) related to items of other comprehensive income (loss)	(2)		38	36
Net current-period other comprehensive income (loss)	24	(239)	(142)	(357)
Balance at July 1, 2022	\$ (11)	\$ (277)	\$ (266)	\$ (554)

During 2022 and 2021, the amounts reclassified out of AOCI included losses of \$125 million and \$50 million related to foreign exchange contracts and losses of \$47 million and \$25 million related to interest rate swaps, respectively. The losses related to interest rate swaps were charged to interest expense and losses related to foreign contracts were substantially all charged to cost of revenue in the Consolidated Statements of Operations.

Note 6. Fair Value Measurements and Investments

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.

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 July 1, 2022 and July 2, 2021, and indicate the fair value hierarchy of the valuation techniques utilized to determine such values:

	July 1, 2022								
	Level 1		L	Level 2		Level 3		Total	
				(in mi	llions)				
Assets:									
Cash equivalents - Money market funds	\$	266	\$	_	\$	_	\$	266	
Foreign exchange contracts		_		61		_		61	
Interest rate swap contracts				3				3	
Total assets at fair value	\$	266	\$	64	\$		\$	330	
Liabilities:									
Foreign exchange contracts	\$		\$	316	\$		\$	316	
Total liabilities at fair value	\$		\$	316	\$		\$	316	

	July 2, 2021							
		Level 1		Level 2		Level 3		Total
				(in mi	lions)			
Assets:								
Cash equivalents - Money market funds	\$	1,283	\$	_	\$	_	\$	1,283
Foreign exchange contracts		_		14		_		14
Total assets at fair value	\$	1,283	\$	14	\$		\$	1,297
Liabilities:								
Foreign exchange contracts	\$	_	\$	65	\$	_	\$	65
Interest rate swap contracts				80				80
Total liabilities at fair value	\$		\$	145	\$		\$	145

Money Market Funds. The Company's money market funds are funds that invest in U.S. Treasury and U.S. Government agency securities. Money market funds are valued based on quoted market prices.

Foreign Exchange Contracts. The Company's foreign exchange contracts are short-term contracts to hedge the Company's foreign currency risk. Foreign exchange contracts are valued using an income approach that is based on a present value of future cash flows model. The market-based observable inputs for the model include forward rates and credit default swap rates. For more information on the Company's foreign exchange contracts, see Note 7, Derivative Instruments and Hedging Activities. Derivative assets and liabilities are reflected in the Company's Consolidated Balance Sheet under Other current assets and Accrued expenses, respectively.

Interest Rate Swaps. The Company's interest rate swaps are long-term contracts to hedge the Company's variable rate debt risk. Interest rate swaps are valued based on estimated present value of future cash flows model. The market-based observable inputs for the model include interest rate curves and credit valuation adjustments based on published credit default swap curves.

During 2022 and 2021, the Company had no transfers of financial assets and liabilities between levels and there were no changes in valuation techniques and the inputs used in the fair value measurement.

Financial Instruments Not Carried at Fair Value

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 fourth quarter of 2022 and the fourth quarter of 2021, respectively.

	July 1, 2022				July 2, 2021				
	Carrying Value		Fair Value		Carrying Value			Fair Value	
				(in m	illions)				
1.50% convertible notes due 2024	\$	1,048	\$	1,040	\$	1,017	\$	1,173	
4.75% senior unsecured notes due 2026		2,291		2,205		2,288		2,556	
Variable interest rate Term Loan A-2 maturing 2027		2,693		2,621		_		_	
2.85% senior unsecured notes due 2029		495		412		_		_	
3.10% senior unsecured notes due 2032		495		389		_		_	
Variable interest rate Term Loan B-4		_		_		1,093		1,094	
Variable interest rate Term Loan A-1		_		_		4,327		4,346	
Total	\$	7,022	\$	6,667	\$	8,725	\$	9,169	

Note 7. Derivative Instruments and Hedging Activities

As of July 1, 2022, 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 pay-fixed interest rate swaps that were designated as cash flow hedges of variable rate interest payments on a portion of its term loans through February 2023. As of July 1, 2022, the Company did not have any derivative contracts with credit-risk-related contingent features.

Changes in fair values of the non-designated foreign exchange contracts are recognized in Other income, net and are largely offset by corresponding changes in the fair values of the foreign currency denominated monetary assets and liabilities. For each of 2022, 2021 and 2020, total net realized and unrealized transaction and foreign exchange contract currency gains and losses were not material to the Company's Consolidated Financial Statements.

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 July 1, 2022 and July 2, 2021, 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 Consolidated Balance Sheets.

Note 8. Debt

Debt consisted of the following as of July 1, 2022 and July 2, 2021:

	 July 1, 2022	July 2, 2021	
	(in mi	llions)
1.50% convertible notes due 2024	\$ 1,100	\$	1,100
4.75% senior unsecured notes due 2026	2,300		2,300
Variable interest rate Term Loan A-2 maturing 2027	2,700		_
2.85% senior unsecured notes due 2029	500		_
3.10% senior unsecured notes due 2032	500		_
Variable interest rate Term Loan A-1	_		4,332
Variable interest rate Term Loan B-4	 		1,093
Total debt	7,100		8,825
Issuance costs and debt discounts	 (78)		(100)
Subtotal	7,022		8,725
Less current portion of long-term debt	 		(251)
Long-term debt	\$ 7,022	\$	8,474

On January 7, 2022, the Company entered into a restatement agreement (the "Restatement Agreement") to amend and restate the Loan Agreement, originally dated as of April 29, 2016 (including subsequent amendments and the Restatement Agreement, collectively, the "Loan Agreement"), to provide for, among other things, (i) the issuance of a new \$3.00 billion Term Loan A-2 maturing in January 2027 (the "Term Loan A-2") to replace its previously existing Term Loan A-1; and (ii) the availability of a new \$2.25 billion revolving credit facility maturing in January 2027 (the "2027 Revolving Facility") to replace its previously existing \$2.25 billion revolving credit facility and (iii) additional covenant flexibility and other modifications. The obligations under the Loan Agreement are the senior unsecured obligations of the Company and do not benefit from any collateral or subsidiary guarantees.

The Term Loan A-2 Loan bears interest, at the Company's option, at a per annum rate equal to either (x) the Adjusted Term SOFR (as defined in the Loan Agreement) plus an applicable margin varying from 1.125% to 2.000% or (y) a base rate plus an applicable margin varying from 0.125% to 1.000%, in each case depending on the corporate family ratings of the Company from at least two of Standard & Poor's Ratings Services ("S&P"), Moody's Investors Service, Inc. ("Moody's") and Fitch Ratings, Inc. ("Fitch"), with an initial interest rate of Adjusted Term SOFR plus 1.375%. During 2022, the Company made scheduled and voluntary principal payments aggregating \$300 million on its Term Loan A-2. \$150 million was applied toward scheduled amortization through the quarter ending September 29, 2023 and the remainder towards the principal due at maturity. As of July 1, 2022, the remaining balance of Term Loan A-2 amortizes in quarterly installments of \$38 million per quarter beginning with the quarter ending December 29, 2023; and the remaining balance payable at maturity on January 7, 2027. Issuance costs for Term Loan A-2 are amortized to interest expense over its term and unamortized costs were \$7 million as of July 1, 2022.

Loans under the 2027 Revolving Facility bear interest at a per annum rate, at the Company's option, equal to either (x) the Adjusted Term SOFR Rate (as defined in the Loan Agreement) plus an applicable margin varying from 1.125% to 2.000% or (y) a base rate plus an applicable margin varying from 0.125% to 1.000%, in each case depending on the corporate family ratings of the Company from at least two of S&P, Moody's and Fitch, with an initial rate of Adjusted Term SOFR plus 1.375%. The Company is also required to pay an unused commitment fee on the 2027 Revolving Facility ranging from 0.120% to 0.350% based on the corporate family ratings of the Company from at least two of S&P, Moody's and Fitch, with an initial unused commitment fee of 0.200%.

In October 2021, the Company voluntarily prepaid the remaining principal balance of its Term Loan B-4 in accordance with its terms.

In December 2021, the Company issued \$500 million aggregate principal amount of 2.850% senior unsecured notes due February 1, 2029 (the "2029 Senior Unsecured Notes") and issued \$500 million aggregate principal amount of 3.100% senior unsecured notes due February 1, 2032 (the "2032 Senior Unsecured Notes") pursuant to the terms of an indenture, dated as of December 10, 2021 (the "Base Indenture") between the Company and U.S. Bank National Association, as trustee (the "Trustee"), as supplemented by the first supplemental indenture dated as of December 10, 2021 (the "First Supplemental Indenture") between the Company and the Trustee. As used herein, "Indenture" means the Base Indenture, as supplemented by the First Supplemental Indenture. The Indenture contains certain restrictive covenants which are subject to a number of limitations and exceptions. Interest for both the 2029 Senior Unsecured Notes and 2032 Senior Unsecured Notes is payable on February 1 and August 1 of each year. The Company is not required to make principal payments on either the 2029 Senior Unsecured Notes or 2032 Senior Unsecured Notes prior to their maturity dates.

In accordance with the Loan Agreement, the Company is required to comply with a leverage ratio financial covenant. As of July 1, 2022, the Company was in compliance with this financial covenant.

In February 2018, the Company issued \$1.10 billion aggregate principal amount of convertible senior notes due February 1, 2024 (the "2024 Convertible Notes"). The 2024 Convertible Notes bear interest at an annual rate of 1.50% with interest payable on February 1 and August 1 of each year. The Company is not required to make principal payments on the 2024 Convertible Notes prior to the maturity date.

Holders of the 2024 Convertible Notes may freely convert their 2024 Convertible Notes on or after November 1, 2023 until the close of business on the business day immediately preceding the maturity date at an initial conversion price of \$121.91 per share of common stock. Prior to November 1, 2023, holders may convert their 2024 Convertible Notes based on variations in market price of the Company's common stock in relation to the conversion price or the trading price of the 2024 Convertible Notes or upon the occurrence of specified corporate events. As of July 1, 2022, the Company is required to settle any conversion value with the principal amount of the 2024 Convertible Notes settled in cash and any excess value in cash, shares of the Company's common stock, or a combination thereof, pursuant to the terms of an indenture, dated as of February 13, 2018 between the Company, HGST, Inc., WD Media, LLC, Western Digital (Fremont), LLC, Western Digital Technologies, Inc. and U.S. Bank National Association, as trustee (the "Trustee"), as supplemented by the first supplemental indenture dated as of June 30, 2022 (the "First Supplemental Indenture") between the Company and the Trustee. Prior to June 30, 2022, any conversion value on the 2024 Convertible Notes could be settled in cash, shares of the Company's common stock, or a combination thereof. As of July 1, 2022, none of the conditions allowing holders of the Convertible Notes to convert had been met. Since February 5, 2021, the Company may redeem all or part of the 2024 Convertible Notes, at its option, if the market price of the Company's stock achieves certain levels.

Through July 1, 2022, the Company had separately accounted for the liability and equity components of the 2024 Convertible Notes. The value of the liability component as of the date of issuance was recognized at the present value of its cash flows using a discount rate of 4.375%, the Company's borrowing rate at the date of the issuance for a similar debt instrument without the conversion feature, resulting in a debt discount of \$165 million, which was allocated to equity as the value of the conversion feature. The 2024 Convertible Notes debt issuance costs were approximately \$18 million, of which \$15 million was allocated to the debt component and \$3 million was allocated to equity. The debt discount and issuance costs are amortized to interest expense over the term of the 2024 Convertible Notes. As of July 1, 2022, debt discount and issuance costs of \$52 million remained unamortized. See Note 2, *Recent Accounting pronouncements*, for a discussion of a change in accounting that became effective July 2, 2022.

In February 2018, the Company issued \$2.30 billion aggregate principal amount of senior unsecured notes due February 15, 2026 (the "2026 Senior Unsecured Notes"). The 2026 Senior Unsecured Notes bear interest at an annual rate of 4.750% with interest payable on February 15 and August 15 of each year. The Company is not required to make principal payments on the 2026 Senior Unsecured Notes prior to the maturity date. Issuance costs for the 2026 Senior Unsecured Notes are amortized to interest expense over the term of the 2026 Senior Unsecured Notes and as of July 1, 2022, issuance costs of \$9 million remained unamortized.

The Loan Agreement requires the Company to comply with a maximum total funded debt to trailing twelve-month Consolidated Adjusted EBITDA ratio financial covenant. Consolidated 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 Loan Agreement, including, for purposes of the financial covenants, an addback for certain depreciation-related payments made to the Company's Flash Ventures. As of July 1, 2022, the Company was in compliance with these financial covenants under the Loan Agreement.

The Loan 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, certain asset sales, mergers, consolidations, liquidations and dissolutions. In addition, the indentures governing the Company's 2026 Senior Unsecured Notes, 2029 Senior Unsecured Notes, 2032 Senior Unsecured Notes and the 2024 Convertible Notes each contain various restrictive covenants, which include limitations on 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.

Future Debt Payments

As of July 1, 2022, required annual future debt payments were as follows:

	_		e Debt nents
		(in mi	illions)
Fiscal year:			
2024		\$	1,213
2025			150
2026			2,450
2027			2,287
2028 and thereafter	_		1,000
Total debt maturities			7,100
Issuance costs and debt discounts	_		(78)
Net carrying value		\$	7,022

Note 9. 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, Thailand and the Philippines. All pension and other post-retirement benefit plans outside of the Company's Japan, Thailand and the Philippines defined benefit pension plans (the "Pension Plans") are immaterial to the Consolidated Financial Statements.

Obligations and Funded Status

The following table presents the unfunded status of the benefit obligations for the Pension Plans:

	2022	2021	2020
		(in millions)	
Change in benefit obligation:			
Projected benefit obligation at beginning of period	\$ 359	9 \$ 366	\$ 352
Service cost	1:	5 16	13
Interest cost	:	5 5	4
Plan amendments	ğ)	_
Actuarial loss (gain)	(3)	1) (5)	3
Benefits paid	(9	9) (11)	(8)
Settlement/curtailment	_	- —	_
Non-U.S. currency movement	(54	4) (12)	2
Projected benefit obligation at end of period	294	4 359	366
Change in plan assets:			
Fair value of plan assets at beginning of period	22	7 215	209
Actual return on plan assets	_	_ 20	4
Employer contributions	10) 11	9
Benefits paid	(7) (11)	(8)
Non-U.S. currency movement	(4	1) (8)	1
Fair value of plan assets at end of period	189	9 227	215
Unfunded status	\$ 103	5 \$ 132	\$ 151

The following table presents the unfunded amounts related to the Pension Plans as recognized on the Company's Consolidated Balance Sheets:

	July 202	1, 2		July 2, 2021
		(in millions)		
Current liabilities	\$	1	\$	1
Non-current liabilities		104		131
Net amount recognized	\$	105	\$	132

The accumulated benefit obligation for the Pension Plans was \$294 million at July 1, 2022. As of July 1, 2022, the Accumulated Other Income pension balance was \$13 million. There were no material prior service credits for the defined benefit pension plans recognized in Accumulated other comprehensive loss in the Consolidated Balance Sheet as of July 1, 2022.

Net periodic benefit costs were not material for 2022, 2021, and 2020.

Assumptions

Weighted-Average Assumptions

The weighted-average actuarial assumptions used to determine the projected benefit obligations for the Pension Plans were as follows:

	2022	2021	2020
Discount rate	2.3 %	1.4 %	1.1 %
Rate of compensation increase	2.3 %	2.0 %	2.0 %

The weighted-average actuarial assumptions used to determine benefit costs for the Pension Plans were as follows:

	2022	2021	2020
Discount rate	1.4 %	1.1 %	1.1 %
Expected long-term rate of return on plan assets	2.5 %	2.5 %	2.5 %
Rate of compensation increase	2.0 %	2.0 %	1.7 %

The Company develops a discount rate by calculating when the estimated benefit payments will be due. Management then matches the benefit payments to high quality bonds which match the timing of the expected benefit payments to determine the appropriate discount rate.

The Company develops the expected long-term rate of return on plan assets by analyzing rates of return in each plan as well as the investment portfolio applicable to the plan depending on each plan's economic environment. The Company's estimates of future rates of return on assets is based in large part on the projected rate of return from the respective investment managers using a long-term view of historical returns, as well as actuarial recommendations using the most current generational and mortality tables and rates. As of July 1, 2022, Pension Plan assets materially consisted of plan assets related to the Japan Pension Plan and as such the assumption used herein is primarily related to the Japan Pension Plan.

The Company develops the rate of compensation increase assumptions using local compensation practices and historical rates of increases.

Plan Assets

Investment Policies and Strategies

The investment policy in the Pension Plans is to generate a stable return on investments over a long-term horizon in order to have adequate pension funds to meet the Company's future obligations. In order to achieve this investment goal, a diversified portfolio with target asset allocation and expected rate of return is established by considering factors such as composition of participants, level of funded status, capacity to absorb risks and the current economic environment. The target asset allocation is 55% in debt securities, 30% in equity securities, and the remaining 15% in other assets. Risk management is accomplished through diversification, periodic review of plan asset performance and appropriate realignment of asset allocation. Assumptions regarding the expected long-term rate of return on plan assets are periodically reviewed and are based on the historical trend of returns, the risk and correlation of each asset and the latest economic environment.

The expected long-term rate of return is estimated based on many factors, including expected forecast for inflation, risk premiums for each asset class, expected asset allocation, current and future financial market conditions and diversification and rebalancing strategies. Historical return patterns and correlations, consensus return forecasts and other relevant financial factors are analyzed periodically by the investment advisor so as to ensure that the expected long-term rate of return is reasonable and appropriate.

Fair Value Measurements

The following tables present the Pension Plans' major asset categories and their associated fair values and net asset values as of July 1, 2022 and July 2, 2021:

		July 1, 2022						
	I	Level 1	I	Level 2	Le	evel 3		Total
				(in mi	illions)			
Plan assets measured at fair value:								
Equity:								
Equity commingled/mutual funds ⁽¹⁾⁽²⁾	\$	_	\$	63	\$	_	\$	63
Fixed income:								
Fixed income commingled/mutual funds ⁽¹⁾⁽³⁾		_		95		_		95
Net plan assets subject to leveling		_		158		_		158
Real estate investment trust at net asset value								31
Total investments at fair value	\$	_	\$	158	\$	_	\$	189
				July 2	2, 2021			
	I	Level 1	I	evel 2		evel 3		Total
				(in mi	illions)			
Plan assets measured at fair value:								
Equity:								
Equity commingled/mutual funds ⁽¹⁾⁽²⁾	\$	_	\$	73	\$	_	\$	73
Fixed income:								
Fixed income commingled/mutual funds ⁽¹⁾⁽³⁾		_		123		_		123
Net plan assets subject to leveling		_		196		_		196
Real estate investment trust at net asset value								30
Total investments at fair value	\$	_	\$	196	\$		\$	226

⁽¹⁾ Commingled funds represent pooled institutional investments.

There were no significant movements of assets between any level categories in 2022 or 2021.

Fair Value Valuation Techniques

Equity securities are valued at the closing price reported on the stock exchange on which the individual securities are traded. Equity commingled/mutual funds are typically valued using the net asset value ("NAV") provided by the investment manager or administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus liabilities and divided by the number of shares or units outstanding. These assets are classified as either Level 1 or Level 2, depending on availability of quoted market prices for identical or similar assets.

If available, fixed income securities are valued using the close price reported on the major market on which the individual securities are traded and are classified as Level 1. The fair value of other fixed income securities is typically estimated using pricing models and quoted prices of securities with similar characteristics and is generally classified as Level 2.

Cash equivalents includes money market accounts that are valued at their cost plus interest on a daily basis, which approximates fair value. Short-term investments represent securities with original maturities of one year or less. These assets are classified as either Level 1 or Level 2.

⁽²⁾ Equity mutual funds invest primarily in equity securities.

⁽³⁾ Fixed income mutual funds invest primarily in fixed income securities.

$\label{thm:corporation} WESTERN \ DIGITAL \ CORPORATION \\ NOTES \ TO \ CONSOLIDATED \ FINANCIAL \ STATEMENTS \ — \ (Continued)$

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Cash	HI	ows

The Company's expected employer contributions for 2023 and annual benefit payments over the next five years for its Pension Plans are not expected to be material.

Note 10. Related Parties and Related Commitments and Contingencies

Flash Ventures

The Company procures substantially all of its flash-based memory wafers from its business ventures with Kioxia Corporation ("Kioxia"), which consists 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 Company has a 49.9% ownership interest and Kioxia has a 50.1% ownership interest in each of these entities. Through Flash Ventures, the Company and Kioxia collaborate in the development and manufacture of flash-based memory wafers, which are manufactured by Kioxia at its wafer fabrication facilities located in Japan using semiconductor manufacturing equipment individually owned or leased by each Flash Ventures entity. Each Flash Ventures entity purchases wafers from Kioxia at cost and then resells those wafers to the Company and Kioxia at cost plus a markup.

Flash Partners. Flash Partners was formed in 2004 in connection with the construction of Kioxia's "Y3" 300-millimeter wafer fabrication facility located in Yokkaichi, Japan.

Flash Alliance. Flash Alliance was formed in 2006 in connection with the construction of Kioxia's "Y4" 300-millimeter wafer fabrication facility located in Yokkaichi, Japan.

Flash Forward. Flash Forward was formed in 2010 in connection with the construction of Kioxia's "Y5" 300-millimeter wafer fabrication facility located in Yokkaichi, Japan. Y5 was built in two phases of approximately equal size.

- New Y2. The Company has a facility agreement with Kioxia related to the construction and operation of Kioxia's "New Y2" 300-millimeter wafer fabrication facility located in Yokkaichi, Japan. New Y2 primarily provided additional clean room space to convert a portion of 2-dimensional ("2D") flash-based wafer production capacity to 3-dimensional ("3D") flash-based wafer production capacity. Production of flash-based wafers in New Y2 started in 2016.
- Y6. The Company also has a facility agreement with Kioxia related to the construction and operation of Kioxia's "Y6" 300-millimeter wafer fabrication facility in Yokkaichi, Japan. Y6 is primarily intended to provide clean room space to continue the transition of existing 2D flash-based wafer capacity to 3D flash-based wafer production capacity. Production of flash-based wafers in Y6 started in 2018.
- K1. The Company also has a facility agreement with Kioxia related to the construction and operation of Kioxia's "K1" 300-millimeter wafer fabrication facility in Kitakami, Japan. The primary purpose of K1 is to provide clean room space to continue the transition of existing flash-based wafer capacity to newer technology nodes. K1 is now fully operational. In connection with the start-up of this facility, as of July 1, 2022, the Company has made prepayments toward future K1 building depreciation aggregating approximately \$360 million which are to be credited against future wafer charges. As of July 1, 2022, there were no remaining committed prepayments.
- Y7. In January 2022, the Company entered into additional agreements regarding Flash Ventures' investment in a new wafer fabrication facility currently under construction in Yokkaichi, Japan, referred to as "Y7". The primary purpose of Y7 is to provide clean room space to continue the transition of existing flash-based wafer capacity to newer flash technology nodes. The Company is committed to pay, among other items, future building depreciation prepayments aggregating approximately \$290 million as follows: \$268 million in 2023 and \$22 million in 2024, to be credited against future wafer charges.

The Company accounts for its ownership position of each entity within Flash Ventures under the equity method of accounting. The financial and other support provided by the Company in all periods presented was either contractually required or the result of a joint decision to expand wafer capacity, transition to new technologies or refinance existing equipment lease commitments. Entities within Flash Ventures are VIEs. The Company evaluated whether it is the primary beneficiary of any of the entities within Flash Ventures for all periods presented and determined that it is not the primary beneficiary of any of the entities within Flash Ventures because it does not have a controlling financial interest in any of those entities. In determining whether the Company is the primary beneficiary, the Company analyzed the primary purpose and design of Flash Ventures, the activities that most significantly impact Flash Ventures' economic performance, and whether the Company had the power to direct those activities. The Company concluded, based upon its 49.9% ownership, the voting structure and the manner in which the day-to-day operations are conducted for each entity within Flash Ventures, that the Company lacked the power to direct most of the activities that most significantly impact the economic performance of each entity within Flash Ventures.

The following table presents the notes receivable from, and equity investments in, Flash Ventures as of July 1, 2022 and July 2, 2021:

	July 1, 2022		uly 2, 2021
	(in mil	llions)	
Notes receivable, Flash Partners	\$ 27	\$	191
Notes receivable, Flash Alliance	55		213
Notes receivable, Flash Forward	793		561
Investment in Flash Partners	166		199
Investment in Flash Alliance	243		293
Investment in Flash Forward	 112		129
Total notes receivable and investments in Flash Ventures	\$ 1,396	\$	1,586

During 2022, 2021 and 2020, the Company made net payments to Flash Ventures of \$4.70 billion, \$4.36 billion and \$3.09 billion, respectively, for purchased flash-based memory wafers and net loans.

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.

As of July 1, 2022 and July 2, 2021, the Company had Accounts payable balances due to Flash Ventures of \$320 million and \$398 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 July 1, 2022, 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.

		fuly 1, 2022
	(in	millions)
Notes receivable	\$	875
Equity investments		521
Operating lease guarantees		1,760
Inventory and prepayments		937
Maximum estimable loss exposure	\$	4,093

As of July 1, 2022 and July 2, 2021, the Company's retained earnings included undistributed earnings of Flash Ventures of \$43 million and \$33 million, respectively.

The Company is obligated to pay for variable costs incurred in producing its share of Flash Ventures' flash-based memory wafer supply, based on its three-month forecast, 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 Flash Ventures entity's operating cash flow is insufficient to fund these investments.

In February 2022, contamination of certain material used in manufacturing processes occurred at both the Yokkaichi and Kitakami, Japan fabrication facilities, resulting in damage to inventory units in production, a temporary disruption to production operations and a reduction in the Company's flash wafer availability. During 2022, the Company incurred charges of \$207 million related to this contamination incident that were recorded in Cost of revenue, which primarily consisted of scrapped inventory and rework costs, decontamination and other costs needed to restore the facilities to normal capacity, and under absorption of overhead costs. The Company is evaluating potential options for recovery.

In June 2019, an unexpected power outage incident occurred at the flash-based memory manufacturing facilities operated by Flash Ventures in Yokkaichi, Japan. The power outage incident impacted the facilities and process tools and resulted in the damage of flash wafers in production and a reduction in the Company's flash wafer availability. As a result of this incident, the Company incurred charges of \$68 million in 2020, which were recorded in Cost of revenue and primarily consisted of the write-off of damaged inventory and unabsorbed manufacturing overhead costs. In 2022 and 2021, the Company recovered \$7 million and \$75 million, respectively, related to this incident from the utility and its insurance carriers, which was recorded in cost of revenue.

Inventory Purchase Commitments with Flash Ventures. Purchase orders placed under Flash Ventures for up to three months are binding and cannot be canceled.

Research and Development Activities. The Company participates in common R&D activities with Kioxia and is contractually committed to a minimum funding level. R&D commitments are immaterial to the Consolidated Financial Statements.

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 are subject to customary covenants and cancellation events related to Flash Ventures and each of the guarantors. The occurrence of a cancellation event could result in an acceleration of Flash Ventures' obligations and a call on the Company's guarantees.

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 July 1, 2022.

				Lease Amounts			
			ı, in		J.S. dollar, in millions)		
Total guarantee obligations		¥	238	\$	1,760		

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 July 1, 2022 in U.S. dollars, based upon the Japanese yen to U.S. dollar exchange rate as of July 1, 2022:

Payment of Principal al Installments Amortization		incipal	Purchase Option Exercise Price at Final Lease Terms		Guarantee Amount	
			(in	millions)		
2023	\$	505	\$	53	\$	558
2024		368		96		464
2025		191		88		279
2026		174		133		307
2027 and thereafter		39		113		152
Total guarantee obligations	\$	1,277	\$	483	\$	1,760

The Company and Kioxia 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 July 1, 2022, no amounts have been accrued in the Consolidated Financial Statements with respect to these indemnification agreements.

Unis Venture

The Company has a joint venture with Unisplendour Corporation Limited and Unissoft (Wuxi) Group Co. Ltd. ("Unis"), 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 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 years ended July 1, 2022, July 2, 2021 and July 3, 2020, the Company recognized approximately 4%, 3%, and 1% of its consolidated revenue on products distributed by the Unis Venture, respectively. The outstanding accounts receivable due from the Unis Venture were 5% of Accounts receivable, net as of both July 1, 2022 and July 2, 2021.

Note 11. Leases and Other Commitments

Leases

The following table summarizes supplemental balance sheet information related to operating leases as of July 1, 2022:

	Lease A	Amounts
Minimum lease payments by fiscal year:	(in m	illions)
2023	\$	48
2024		48
2025		44
2026		43
2027		39
Thereafter		147
Total future minimum lease payments		369
Less: Imputed Interest		52
Present value of lease liabilities		317
Less: Current portion (included in Accrued expenses)		40
Long-term operating lease liabilities (included in Other liabilities)	\$	277
Operating lease right-of-use assets (included in Other non-current assets)	\$	300
Weighted average remaining lease term in years		8.3
Weighted average discount rate		3.4 %

The following table summarizes supplemental disclosures of operating cost and cash flow information related to operating leases for the year ended July 1, 2022:

		ıly 1, 2022
	(in n	nillions)
Cost of operating leases	\$	58
Cash paid for operating leases		51
Operating lease assets obtained in exchange for operating lease liabilities		137

Cost of operating leases was as follows:

	2022			2021	2020
			(in	millions)	_
es	\$ 5	58	\$	50	\$ 55

Purchase Agreements and Other Commitments

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 agreements with suppliers that contain fixed future commitments, which are contingent on certain conditions such as performance, quality and technology of the vendor's components. As of July 1, 2022, the Company had the following minimum long-term commitments:

	Long-termcommitments
	(in millions)
Fiscal year:	
2023	\$ 572
2024	348
2025	180
2026	53
2027	46
Thereafter	150
Total	\$ 1,349

Note 12. Western Digital Corporation 401(k) Plan

The Company maintains the Western Digital Corporation 401(k) Plan (the "Plan"). The Plan covers substantially all domestic employees, subject to certain eligibility requirements. Eligible employees receive employer matching contributions immediately upon hire unless the individual is covered by a collective bargaining agreement, provides services as a consultant, intern, independent contractor, leased or temporary employee, or otherwise is not treated as a common-law employee.

Through December 31, 2021, eligible employees were generally able to contribute up to 75% of their eligible compensation on a combined pre-tax and Roth basis, 10% on a combined pre-tax catch-up and Roth catch-up basis, and 10% on a non-Roth after-tax basis subject to Internal Revenue Service ("IRS") limitations. Effective January 1, 2022, eligible employees are generally able to contribute up to 85% of their eligible compensation on a combined pre-tax and Roth basis regardless of age, and 10% of their eligible compensation on an after-tax basis by payroll withholding. The Company makes a basic matching contribution equal to 50% of each eligible participant's contribution that does not exceed 6% of the eligible participant's annual compensation in the year of contribution. Prior to January 1, 2022, the Company's employer matching contributions vested over a two-year graded period through December 31, 2021 with all unvested contributions vesting on December 31, 2021 and, effective January 1, 2022, the Company's employer matching contributions vest immediately. The Company may suspend matching contributions at any time at its discretion. Contributions, including the Company's matching contribution to the Plan, are recorded as soon as administratively possible after the Company makes payroll deductions from Plan participants.

For 2022, 2021 and 2020, the Company made Plan contributions of \$36 million, \$34 million and \$33 million, respectively.

Note 13. Shareholders' Equity

2021 Long-Term Incentive Plan

In November 2021, stockholders approved the Western Digital Corporation 2021 Long-Term Incentive Plan (the "2021 Plan"). Upon the effective date of the 2021 Plan, no new awards were granted under the Western Digital Corporation Amended and Restated 2017 Performance Incentive Plan (the "2017 Plan"). The aggregate maximum number of shares of the Company's common stock that may be issued pursuant to awards from the 2021 Plan may not exceed (a) 9.5 million shares, less (b) one share of common stock for each share of common stock granted under a prior plan on or after September 5, 2021 and prior to the 2021 Plan's effective date, plus (c) any shares of common stock subject to outstanding awards under a prior plan as of the effective date that on or after the effective date are forfeited, terminated, expire, lapse without being exercised (to the extent applicable), or are otherwise reacquired by the Company. Any shares subject to awards under the 2017 Plan that are cancelled, forfeited, or otherwise terminate without having vested or been exercised, as applicable, will become available for award grants under the 2021 Plan. The types of awards that may be granted under the 2021 Plan include stock options, stock appreciation rights ("SARs"), RSUs, PSUs, restricted stock and other forms of awards granted or denominated in the Company's common stock or units of the Company's common stock, as well as cash awards. Persons eligible to receive awards under the 2021 Plan include officers and employees of the Company or any of its subsidiaries, directors of the Company and certain consultants and advisors to the Company or any of its subsidiaries. The vesting of awards under the 2021 Plan and the 2017 Plan is determined at the date of grant. Each award expires on a date determined at the date of grant; however, the maximum term of options and SARs is ten years after the grant date of the award. RSUs typically vest over periods ranging from two to four years from the date of grant. PSUs are granted to certain employees and vest only after the achievement of pre-determined performance conditions or market conditions and completion of requisite service periods. Once the performance conditions or market conditions are met, vesting of PSUs is generally subject to continued service by the employee. Currently, there are outstanding awards that may vest under the 2017 Plan as well as outstanding awards of stock options under the SanDisk Corporation 2013 Incentive Plan, a plan assumed in connection with the acquisition of SanDisk Corporation, which may affect dilution.

Outstanding RSU and PSU awards have dividend equivalent rights which entitle holders of such outstanding awards to the same dividend value per share as holders of common stock. Dividend equivalent rights are subject to the same vesting and other terms and conditions as the corresponding unvested RSUs and PSUs. Dividend equivalent rights are accumulated and paid in additional shares when the underlying shares vest.

As of July 1, 2022, the maximum number of shares of the Company's common stock that was authorized for award grants under the 2021 Plan was 10.8 million shares. Shares issued in respect of all awards granted under the 2021 Plan count against the 2021 Plan's share limit on a one-for-one basis, whereas under the 2017 Plan, shares issued in respect of awards other than stock options and SARs granted count against the 2017 Plan's share limit as 1.72 shares for every one share issued in connection with such award. The 2021 Plan will terminate on November 22, 2031 unless terminated earlier by the Company's Board of Directors.

Employee Stock Purchase Plan

Under the Company's ESPP, eligible employees may authorize payroll deductions of up to 10% of their eligible compensation, subject to IRS limitations, during prescribed offering periods to purchase shares of the Company's common stock at 95% of the fair market value of common stock either at the beginning of that offering period or on the applicable exercise date, whichever is less. A participant may participate in only one offering period at a time, and a new offering period generally begins each June 1st and December 1st. Each offering period is generally 24 months and consists of four exercise dates (each, generally six months following the start of the offering period or the preceding exercise date, as the case may be). If the fair market value of the Company's common stock is less on a given exercise date than on the date of grant, employee participation in that offering period ends and participants are automatically re-enrolled in the next new offering period.

During 2022, 2021 and 2020, the Company issued 2.1 million, 3.2 million, and 3.0 million shares, respectively, under the ESPP for aggregate purchase amounts of \$113 million, \$115 million and \$107 million, respectively.

To the extent available, the Company may issue shares out of treasury stock upon the vesting of awards, the exercise of employee stock options and the purchase of shares pursuant to the ESPP.

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 Consolidated Statements of Operations:

	2022		2021	 2020
			(in millions)	
Options	\$	_	\$ —	\$ 7
RSUs and PSUs		286	282	268
ESPP		40	36	 33
Total	\$	326	\$ 318	\$ 308

	2022			2021		2020
			(in	millions)		
Cost of revenue	\$	48	\$	55	\$	51
Research and development		167		158		163
Selling, general and administrative		111		105		94
Subtotal		326		318		308
Tax benefit		(48)		(47)		(45)
Total	\$	278	\$	271	\$	263

Windfall tax benefits related to the vesting and exercise of stock-based awards, which are recognized as a component of the Company's Income tax expense, were not material for the periods presented.

Compensation cost related to unvested RSUs, PSUs, and rights to purchase shares of common stock under the 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 July 1, 2022:

	_	Unamortized Compensation Costs	Weighted Average Service Period
		(in millions)	(years)
RSUs and PSUs (1)	\$	557	2.2
ESPP	_	61	1.2
Total unamortized compensation cost	\$	618	

Weighted average service period assumes the performance conditions are met for the PSUs.

Plan Activities

Stock Options

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

	Number of Shares	Ave	Weighted erage Exercise ice Per Share	Weighted Average Remaining Contractual Life		ggregate insic Value
	(in millions)			(in years)	(ii	n millions)
Options outstanding at June 28, 2019	3.9	\$	65.72			
Exercised	(0.8)		43.26		\$	12
Canceled or expired	(0.4)		88.58			
Options outstanding at July 3, 2020	2.7		69.16			
Exercised	(0.4)		44.34			6
Canceled or expired	(0.8)		75.42			
Options outstanding at July 2, 2021	1.5		72.84			
Exercised	(0.2)		43.80			3
Canceled or expired	(0.4)		97.65			
Options outstanding at July 1, 2022	0.9	\$	66.76	0.54		

No options were granted in 2022, 2021 or 2020. All outstanding options were exercisable at July 1, 2022.

RSUs and PSUs

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

	Number of Shares		
	(in millions)		(in millions)
RSUs and PSUs outstanding at June 28, 2019	11.6	\$ 62.07	
Granted	7.4	55.32	
Vested	(4.4)	58.36	\$ 252
Forfeited	(1.3)	63.33	
RSUs and PSUs outstanding at July 3, 2020	13.3	60.92	
Granted	8.8	40.40	
Vested	(4.5)	60.18	196
Forfeited	(1.5)	55.74	
RSUs and PSUs outstanding at July 2, 2021	16.1	50.12	
Granted	6.9	60.00	
Vested	(5.2)	54.27	317
Forfeited	(2.4)	52.14	
RSUs and PSUs outstanding at July 1, 2022	15.4	\$ 52.89	

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.

Fair Value Valuation Assumptions

RSU and PSU Grants

The fair value of the Company's RSU and PSU awards with a performance condition is determined based upon the closing price of the Company's stock price on the date of grant. The fair value of PSU awards with a market condition is estimated using a Monte Carlo simulation model on the date of grant using historical volatility.

ESPP — Black-Scholes-Merton Model

The fair value of ESPP purchase rights issued is estimated at the date of grant of the purchase rights using the Black-Scholes-Merton option-pricing model. The Black-Scholes-Merton option-pricing model requires the input of assumptions such as the expected stock price volatility and the expected period until options are exercised. Purchase rights under the ESPP are generally granted on either June 1st or December 1st of each year.

The fair values of ESPP purchase rights have been estimated at the date of grant using a Black-Scholes-Merton option-pricing model with the following weighted average assumptions:

	2022	2021	2020
Weighted-average expected term (in years)	1.25	1.25	1.25
Risk-free interest rate	1.42%	0.10%	0.55%
Stock price volatility	0.48	0.56	0.59
Dividend yield	%	%	1.08%
Fair value	\$15.56	\$21.59	\$12.76

Stock Repurchase Program

The Company's Board of Directors has authorized a stock repurchase program for the repurchase of up to \$5.0 billion of the Company's common stock, which authorization is effective through July 25, 2023. For the year ended July 1, 2022, the Company did not make any stock repurchases and has not repurchased any shares of its common stock pursuant to its stock repurchase program since the first quarter of 2019. Although the Company will reevaluate the repurchasing of common stock when appropriate, there can be no assurance if, when or at what level the Company may resume such activity. The remaining amount available to be repurchased under the Company's current stock repurchase program as of July 1, 2022 was \$4.5 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.

Stock Reserved for Issuance

The following table summarizes all common stock reserved for issuance at July 1, 2022:

	Number of Shares
	(in millions)
Outstanding awards and shares available for award grants	26
ESPP	4
Total	30

Dividends to Shareholders

The Company issued a quarterly cash dividend from the first quarter of 2013 up to the third quarter of 2020. In April 2020, the Company suspended its dividend to reinvest in the business and to support its ongoing deleveraging efforts.

Note 14. Income Tax Expense

Income (loss) Before Taxes

The domestic and foreign components of Income (loss) before taxes were as follows:

	2022		2021		2020	
				(in millions)		
Foreign	\$	1,384	\$	218	\$	(695)
Domestic		739		709		649
Income (loss) before taxes	\$	2,123	\$	927	\$	(46)

Income Tax Expense (Benefit)

The components of the income tax expense (benefit) were as follows:

	2022		2021		2020
			(1	in millions)	
Current:					
Foreign	\$	143	\$	195	\$ 157
Domestic - Federal		341		154	124
Domestic - State		25		(1)	5
		509		348	286
Deferred:					
Foreign		27		(20)	(29)
Domestic - Federal		84		(208)	(53)
Domestic - State		3		(14)	 _
		114		(242)	(82)
Income tax expense	\$	623	\$	106	\$ 204

The Tax Cuts and Jobs Act (the "2017 Act"), enacted on December 22, 2017, includes a broad range of tax reform proposals affecting businesses. The Company completed its accounting for the tax effects of the enactment of the 2017 Act during the second quarter of 2019. However, the U.S. Treasury and the IRS have issued tax guidance on certain provisions of the 2017 Act since the enactment date, and the Company anticipates the issuance of additional regulatory and interpretive guidance. The Company applied a reasonable interpretation of the 2017 Act along with the then-available guidance in finalizing its accounting for the tax effects of the 2017 Act. Any additional regulatory or interpretive guidance would constitute new information, which may require further refinements to the Company's estimates in future periods.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was enacted in response to the COVID-19 pandemic in the U.S. The CARES Act, among other things, allows net operating losses arising in tax years 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes and increases the business interest expense limitation from 30% to 50% of adjusted taxable income for tax years 2019 and 2020. Additionally, countries around the world implemented emergency tax measures to provide relief similar to the CARES Act. The provisions of the CARES Act and the emergency tax measures around the world did not result in a material cash benefit.

On December 27, 2020, the Consolidated Appropriations Act (the "Appropriations Act") was enacted to fund the federal government through their fiscal year, extend certain expiring tax provisions and provide additional emergency relief to individuals and businesses related to the COVID-19 pandemic in the U.S. The provisions of the Appropriations Act did not result in a material impact on the Company's Consolidated Financial Statements.

On March 11, 2021, the American Rescue Plan Act of 2021 (the "Rescue Act") was enacted to provide additional emergency relief to individuals and businesses related to the COVID-19 pandemic in the U.S. The Rescue Act includes certain business-related provisions, which did not have a material impact on the Company's Consolidated Financial Statements. The Company continues to monitor and evaluate the regulatory and interpretive guidance related to the CARES Act, the Appropriations Act and the Rescue Act, as well as legislation in other jurisdictions.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022, which contained significant law changes related to tax, climate, energy, and health care. The tax measures include, among other things, a corporate alternative minimum tax of 15%. The corporate alternative minimum tax will not be effective for the Company until fiscal year 2024 and the Company is currently evaluating the potential effects of these legislative changes.

Deferred Taxes

Temporary differences and carryforwards, which give rise to a significant portion of deferred tax assets and liabilities were as follows:

	July 1, 2022		uly 2, 2021
	(in mi		
Deferred tax assets:			
Sales related reserves and accrued expenses not currently deductible	\$ 71	\$	88
Accrued compensation and benefits not currently deductible	114		143
Deferred revenue	_		128
Net operating loss carryforward	195		196
Business credit carryforward	483		461
Long-lived assets	72		101
Other	178		131
Total deferred tax assets	1,113		1,248
Deferred tax liabilities:			
Long-lived assets	(128)		(202)
Unremitted earnings of certain non-U.S. entities	(288)		(280)
Other	 (17)		(20)
Total deferred tax liabilities	(433)		(502)
Valuation allowances	 (580)		(558)
Deferred tax assets, net	\$ 100	\$	188

The net deferred tax asset valuation allowance increased by \$22 million primarily due to an increase from the generation of additional business state tax credits carryforwards during the year ended July 1, 2022. The assessment of valuation allowances against deferred tax assets requires estimations and significant judgment. The Company continues to assess and adjust its valuation allowance based on operating results and market conditions. After weighing both the positive and negative evidence available, including, but not limited to, earnings history, projected future outcomes, industry and market trends and the nature of each of the deferred tax assets, the Company determined that it is able to realize most of its deferred tax assets with the exception of certain loss and credit carryforwards.

The Company is permanently reinvested with respect to certain foreign earnings. There is no unrecognized deferred tax liability associated with the repatriation of these foreign undistributed earnings as it can be achieved without additional federal tax consequences.

Effective Tax Rate

Reconciliation of the U.S. Federal statutory rate to the Company's effective tax rate is as follows:

	2022	2021	2020
U.S. Federal statutory rate	21 %	21 %	21 %
Tax rate differential on international income	(9)	8	(443)
Tax effect of U.S. foreign income inclusion	_	5	(38)
Tax effect of U.S. foreign minimum tax	5	1	(235)
Tax effect of U.S. foreign derived intangible income	(1)	(14)	109
Tax effect of U.S. non-deductible stock-based compensation	1	1	(21)
Tax effect of U.S. permanent differences	_	1	(26)
IRS Tentative Settlement	15	_	_
Change in valuation allowance	1	(7)	(12)
Unremitted earnings of certain non-U.S. entities	1	6	(114)
Foreign income tax credits	(3)	(5)	191
R&D tax credits	(4)	(8)	147
Other	2	2	(22)
Effective tax rate	29 %	11 %	(443)%

Tax Holidays and Carryforwards

A substantial portion of the Company's manufacturing operations in Malaysia, the Philippines and Thailand operate under various tax holidays and tax incentive programs, which will expire in whole or in part at various dates during 2024 through 2031. Certain of the holidays may be extended if specific conditions are met. The net impact of these tax holidays and tax incentives was an increase to the Company's net earnings by \$566 million, or \$1.79 per diluted share, \$390 million, or \$1.26 per diluted share, and \$464 million, or \$1.54 per diluted share, in 2022, 2021, and 2020, respectively.

As of July 1, 2022, the Company had varying amounts of federal and state NOL/tax credit carryforwards that do not expire or, if not used, expire in various years. Following is a summary of the Company's federal and state NOL/tax credit carryforwards and the related expiration dates of these NOL/tax credit carryforwards:

Jurisdiction	NOL/Tax Credit Carryforward Amount	Expiration
	(in millions)	
Federal NOL (Pre 2017 Act Generation)	\$ 627	2023 to 2038
State NOL	364	2031 to 2038
Federal tax credits	57	2023 to 2043
State tax credits	691	No expiration

The federal and state NOLs and credits relating to various acquisitions are subject to limitations under Sections 382 and 383 of the Internal Revenue Code. The Company expects the total amount of federal and state NOLs ultimately realized will be reduced as a result of these provisions by \$125 million and \$240 million, respectively. The Company expects the total amount of federal and state credits ultimately realized will be reduced as a result of these provisions by \$27 million and \$2 million, respectively.

As of July 1, 2022, the Company had varying amounts of foreign NOL carryforwards that do not expire or, if not used, expire in various years, depending on the country. The major jurisdictions that the Company receives foreign NOL carryforwards and the related amounts and expiration dates of these NOL carryforwards are as follows:

Jurisdiction	Carryfor	NOL Carryforward Amount		
	(in mill	ions)		
Malaysia	\$	122	2025 to 2028	
Belgium		106	No expiration	
Japan		84	2024 to 2031	
Spain		46	No expiration	
Netherlands		12	2025 to 2026	

Uncertain Tax Positions

With the exception of certain unrecognized tax benefits that are directly associated with the tax position taken, unrecognized tax benefits are presented gross in the Consolidated Balance Sheets.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits excluding accrued interest and penalties:

	2	2022		2021		2020
			(in	millions)		
Unrecognized tax benefit, beginning balance	\$	748	\$	717	\$	695
Gross increases related to current year tax positions		12		21		11
Gross increases related to prior year tax positions		358		46		35
Gross decreases related to prior year tax positions		(65)		(20)		(4)
Settlements		(1)		(9)		(12)
Lapse of statute of limitations		(5)		(7)		(8)
Unrecognized tax benefit, ending balance	\$	1,047	\$	748	\$	717

As of July 1, 2022, July 2, 2021 and July 3, 2020, the portion of the gross unrecognized tax benefits, if recognized, that would affect the effective tax rate is \$903 million, \$612 million, and \$583 million. Interest and penalties related to unrecognized tax benefits are recognized in liabilities recorded for uncertain tax positions and are recorded in the provision for income taxes. Accrued interest and penalties included in the Company's liability related to unrecognized tax benefits as of July 1, 2022, July 2, 2021 and July 3, 2020 was \$254 million, \$138 million and \$137 million, respectively. As of July 1, 2022, July 2, 2021 and July 3, 2020, the Company's payables related to unrecognized tax benefits, including accrued interest and penalties, were \$1.16 billion, \$750 million, and \$720 million, respectively. The Company believes it is reasonably likely that payments of approximately \$600 million to \$700 million may be made within the next twelve months and have classified that portion of these unrecognized tax benefits, including interest, in Income taxes payable on the Consolidated Balance Sheets as of July 1, 2022, July 2, 2021 and July 3, 2020.

The Company files U.S. Federal, U.S. state and foreign tax returns. For both federal and state tax returns, with few exceptions, the Company is subject to examination for 2013 through 2020. The Company is no longer subject to examination by the IRS for periods prior to 2012, although carry forwards generated prior to those periods may still be adjusted upon examination by the IRS or state taxing authority if they either have been or will be used in a subsequent period. In the major foreign jurisdictions where there is no tax holiday, the Company could be subject to examination in China for calendar years 2012 through 2021, in Ireland for calendar year 2018 through fiscal year 2021, in India for fiscal years 2008 through 2021, in Israel for calendar year 2016 through fiscal year 2021 and in Japan for fiscal years 2015 through 2021, in Malaysia for fiscal years 2014 through 2021, in Thailand for fiscal years 2012 through 2021, in Singapore for fiscal years 2018 through 2021, and in the United Kingdom for fiscal years 2017 through 2021.

As previously disclosed, the IRS issued statutory notices of deficiency and notices of proposed adjustments with respect to transfer pricing with the Company's foreign subsidiaries and intercompany payable balances for years 2008 through 2015. In September 2018 and March 2019, the Company filed petitions with the U.S. Tax Court covering years 2008 through 2012, for which it had received statutory notices of deficiency, while years 2013 through 2015 remain in the jurisdiction of the IRS's Examination function. The IRS has filed various Amendments to Answer with the U.S. Tax Court which, together with the notices of proposed adjustments, would result in additional federal income tax liabilities totaling approximately \$1.6 billion and penalties totaling \$449 million with respect to years 2008 through 2015. In May 2022, the Company and the IRS tentatively reached a settlement for resolving the statutory notices of deficiency and notices of proposed adjustments with respect to years 2008 through 2015 subject to the parties entering into final stipulations and a closing agreement. As a result, the trial originally scheduled to take place in May 2022 was cancelled. The tentative settlement for resolution incrementally increased the liability for unrecognized tax benefits, including interest and offsetting tax benefits, by \$324 million. Including this incremental increase, the Company expects to pay tax and interest totaling approximately \$600 million to \$700 million, which the Company expects to be partially offset by future reductions to its mandatory deemed repatriation tax obligations and tax savings from interest deductions aggregating to approximately \$100 to \$150 million. While the Company continues to work with the IRS to come to a final agreement on the federal tax and interest calculations, the Company is uncertain as to when a final agreement will be reached and the exact timing of when any payments will be made. However, the Company believes it is reasonably likely that these payments may be made within the next twelve months and have classified that portion of these unrecognized tax benefits, including interest in Income taxes payable on its Consolidated Balance Sheet as of July 1,2022. This classification and amount may be subject to change in the next twelve months depending on when the Company is able to reach a final agreement with the IRS.

The Company believes that adequate provision has been made for any adjustments that may result from any other tax examinations. However, the outcome of such 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 July 1, 2022, with the exception of the tentative settlement, 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 relating to the examination of the Company's tax returns.

Note 15. Net Income (Loss) Per Common Share

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

		2022		2021		2020
	(in millions, except per share data)					ı)
Net income (loss)	\$	1,500	\$	821	\$	(250)
Weighted average shares outstanding:						
Basic		312		305		298
Employee stock options, RSUs, PSUs and ESPP		4		4		
Diluted		316		309		298
Income (loss) per common share						
Basic	\$	4.81	\$	2.69	\$	(0.84)
Diluted	\$	4.75	\$	2.66	\$	(0.84)
Anti-dilutive potential common shares excluded		3		5		15

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 (loss) 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 2022, the Company excluded 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 2020, the Company recorded net loss, and all shares subject to outstanding equity awards have been excluded for those periods because including them would be anti-dilutive.

Note 16. Employee Termination, Asset Impairment, and Other Charges

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

	2022		2021		2020
			(in millions)		
Employee termination and other charges:					
Closure of Foreign Manufacturing Facilities	\$	_	\$	\$	5
Business Realignment		50	28		44
Employee termination benefits		50	28		49
Gain on disposition of assets:					
Business Realignment		(7)	(75)		(17)
Asset impairments and losses (gains) on disposal of assets		(7)	(75)		(17)
Total employee termination, asset impairment, and other charges	\$	43	\$ (47)	\$	32

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 substantially completed the closure in 2019.

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, primarily consisting of organization rationalization designed to streamline its business, reduce its cost structure and focus its resources. The Company may also record credits related to gains upon sale of property in connection with these activities. The Company recognized gains related to the disposition of assets associated with these activities \$7 million and \$75 million for 2022 and 2021, respectively.

The following table presents an analysis of the components of the activity against the reserve, which consisted entirely of employee termination benefits, during the year ended July 1, 2022:

Employee

		pioyee nination nefits
	(in n	illions)
Accrual balance at July 2, 2021	\$	2
Charges		50
Cash payments		(35)
Accrual balance at July 1, 2022	\$	17

Note 17. Legal Proceedings

Tax

For disclosures regarding statutory notices of deficiency issued by the IRS on June 28, 2018 and December 10, 2018, petitions filed by the Company with the U.S. Tax Court in September 2018 and March 2019, additional penalties asserted by the IRS in March 2021 and further Amendments to Answers filed by the IRS in June 2021 and January 2022, and a tentative resolution with respect to certain matters, see Note 14, *Income Tax Expense*.

Other Matters

In the normal course of business, the Company is subject to 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 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 matters could differ materially from the Company's expectations.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) of 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 Annual Report on Form 10-K.

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this Annual Report on Form 10-K, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that the transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and our directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Our management evaluated the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control — Integrated Framework (2013)*. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of the end of the period covered by this Annual Report on Form 10-K. KPMG LLP, our independent registered public accounting firm, which audited the Consolidated Financial Statements included in this Annual Report on Form 10-K, has issued an audit report on our internal control over financial reporting. See Report of Independent Registered Public Accounting Firm herein.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the fourth quarter ended July 1, 2022, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Effectiveness of Controls

Our management, including our Chief Executive Officer and our Chief Financial Officer, does not expect our internal controls over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a system of internal control over financial reporting, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

Disclosure Pursuant to Section 13(r) of the Securities Exchange Act of 1934

On March 2, 2021, the U.S. government designated the Russian Federal Security Service (the "FSB") as a blocked party under Executive Order 13382; however, on the same day, the U.S. Department of the Treasury's Office of Foreign Assets Control issued General License No. 1B (the "OFAC General License"), which generally authorizes U.S. companies to engage in certain transactions and dealings with the FSB necessary and ordinarily incident to requesting or obtaining licenses, permits, certifications or notifications issued or registered by the FSB for the importation, distribution or use of information technology products in the Russian Federation.

Prior to February 24, 2022, in the normal course of business and as permitted and authorized by the OFAC General License, we filed notifications with, or applied for import licenses and permits from, the FSB as required pursuant to Russian encryption product import controls for the purpose of enabling us or our channel partners to import and distribute certain products in the Russian Federation. There are no gross revenues or net profits directly associated with these activities, and we do not distribute or sell products or provide services to the FSB. After February 24, 2022, we ceased shipments into Russia and we have not filed notifications with or applied for import licenses and permits from the FSB since such date. We expect to resume filing notifications with and applications for import licenses and permits from the FSB to qualify our products for importation and distribution in the Russian Federation if and when we decide to resume sales into the Russian Federation and as permitted by applicable U.S. law, including the OFAC General License.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

There is incorporated herein by reference the information required by this Item included in the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after the close of the year ended July 1, 2022. In addition, our Board of Directors has adopted a Code of Business Ethics that applies to all of our directors, employees and officers, including our Chief Executive Officer and Chief Financial Officer. The current version of the Code of Business Ethics is available on our website under the Corporate Governance section at www.westerndigital.com. To the extent required by rules adopted by the SEC and The Nasdaq Stock Market LLC, we intend to promptly disclose future amendments to certain provisions of the Code of Business Ethics, or waivers of such provisions granted to executive officers and directors, on our website under the Corporate Governance section at www.westerndigital.com.

Item 11. Executive Compensation

There is incorporated herein by reference the information required by this Item included in the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after the close of the year ended July 1, 2022.

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

There is incorporated herein by reference the information required by this Item included in the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after the close of the year ended July 1, 2022.

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

There is incorporated herein by reference the information required by this Item included in the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after the close of the year ended July 1, 2022.

Item 14. Principal Accountant Fees and Services

There is incorporated herein by reference the information required by this Item included in the Company's Proxy Statement for the 2022 Annual Meeting of Stockholders, which will be filed with the SEC no later than 120 days after the close of the year ended July 1, 2022.

PART IV

Item 15. Exhibits and Financial Statement Schedules

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

- (1) *Financial Statements*. The financial statements included in Part II, Item 8 of this document are filed as part of this Annual Report on Form 10-K.
- (2) Financial Statement Schedules.

All schedules are omitted as the required information is immaterial, inapplicable or the information is presented in the Consolidated Financial Statements or related Notes.

(3) Exhibits. The exhibits listed in the Exhibit Index below are filed with, or incorporated by reference in, this Annual Report on Form 10-K, as specified in the Exhibit List, from exhibits previously filed with the SEC. Certain agreements listed in the Exhibit List 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
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 February 10, 2021 (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 February 12, 2021)
4.1	Description of Western Digital Corporation's Capital Stock (Filed as Exhibit 4.1 to the Company's Annual Report on Form 10-K (File No. 1-08703) with the Securities and Exchange Commission on August 27, 2021)
4.2	Indenture (including Form of 4.750% Senior Notes due 2026), dated as of February 13, 2018, among Western Digital Corporation; HGST, Inc., WD Media, LLC, Western Digital (Fremont), LLC and Western Digital Technologies, Inc., as guarantors; and U.S. Bank National Association, as trustee (Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 333-222762) with the Securities and Exchange Commission on February 13, 2018)
4.3	Indenture (including Form of 1.50% Convertible Senior Notes due 2024), dated as of February 13, 2018, among Western Digital Corporation; HGST, Inc., WD Media, LLC, Western Digital (Fremont), LLC and Western Digital Technologies, Inc., as guarantors; and U.S. Bank National Association, as trustee (Filed as Exhibit 4.2 to the Company's Current Report on Form 8-K (File No. 333-222762) with the Securities and Exchange Commission on February 13, 2018)
4.4	First Supplemental Indenture, dated as of June 30, 2022, by and between Western Digital Corporation and U.S. Bank National Association, as trustee (Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on July 1, 2022)
4.5	Indenture, dated as of December 10, 2021, between Western Digital Corporation and U.S. Bank National Association, as trustee (Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on December 10, 2021)
4.6	First Supplemental Indenture (including Form of 2.850% Senior Notes due 2029 and Form of 3.100% Senior Notes due 2032), dated as of December 10, 2021, between Western Digital Corporation and U.S. Bank National Association, as trustee (Filed as Exhibit 4.2 to the Company's Current Report on Form 8-K (File No. 1-08703) with the Securities and Exchange Commission on December 10, 2021)
10.1	Western Digital Corporation Amended and Restated 2017 Performance Incentive Plan, amended and restated as of August 11, 2020 (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 9, 2021)*
10.1.1	Form of Notice of Grant of Stock Units and Stock Unit Award Agreement, under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.1.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 6, 2018)*
10.1.2	Form of Notice of Grant of Performance Stock Units and Performance Stock Unit Award Agreement - Financial Measures, under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 12, 2019)*
10.1.3	Form of Notice of Grant of Performance Stock Units and Performance Stock Unit Award Agreement - TSR Measure, under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 12, 2019)*
10.1.4	Form of Notice of Grant of Performance Stock Units and Performance Stock Unit Award Agreement – Financial Measure, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 9, 2021)*
10.1.5	Form of Notice of Grant of Performance Stock Units and Performance Stock Unit Award Agreement – TSR Measure, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 9, 2021)*
10.1.6	Form of Notice and Grant of Performance Stock Units and Performance Stock Unit Award Agreement- Financial Measure, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 4, 2021)*
10.1.7	Form of Notice and Grant of Performance Stock Units and Performance Stock Unit Award Agreement- TSR Measure, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 4, 2021)*

Exhibit Number	Description
10.1.8	Form of Notice of Grant of Stock Option and Option Agreement - Executives, as amended on November 3, 2015, under the Western Digital Corporation Amended and Restated 2004 Performance Incentive Plan (now named the Western Digital Corporation 2017 Performance Incentive Plan) (Filed as Exhibit 10.1.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 10, 2016)*
10.1.9	Western Digital Corporation Amended and Restated 2017 Performance Incentive Plan Non-Employee Director Restricted Stock Unit Grant Program, amended and restated as of August 16, 2021 (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 4, 2021)*
10.1.10	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Award Agreement - Vice President and Above under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 6, 2018)*
10.1.11	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Award Agreement - Vice President and Above under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 12, 2019)*
10.1.12	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Award Agreement – Vice President and Above, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (Filed No. 1-08703) with the Securities and Exchange Commission on February 9, 2021)*
10.1.13	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Award Agreement - Vice President and Above, under the Amended and Restated Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 4, 2021)*
10.1.14	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Award Agreement under the Western Digital Corporation 2017 Performance Incentive Plan (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 6, 2018)*
10.1.15	Notice of Grant of Performance Stock Units and Performance Stock Unit Award – TSR Measure (CEO Sign-On Award) (Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on May 8, 2020)*
10.1.16	First Amendment to the Notice of Grant of Performance Stock Units and Performance Stock Unit Award – TSR Measure (CEO Sign-On Award) (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 June 17, 2022)*
10.2	Western Digital Corporation Executive Short-Term Incentive Plan (supersedes the Western Digital Corporation Executive Short-Term Incentive Plan dated August 7, 2019), dated February 9, 2021 (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on May 6, 2021)*
10.3	Western Digital Corporation 2021 Long-Term Incentive Plan, adopted as of August 18, 2021 (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 18, 2021)*
10.3.1	Form of Grant Notice for Performance Stock Unit Award (TSR Measure) under the Western Digital Corporation 2021 Long-Term Incentive Plan (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)*
10.3.2	Form of Grant Notice for Performance Stock Unit Award (Financial Measures) under the Western Digital Corporation 2021 Long-Term Incentive Plan (Filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)*
10.3.3	Form of Grant Notice for Restricted Stock Unit Award – Vice President and Above, under the Western Digital Corporation 2021 Long-Term Incentive Plan (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)*
10.3.4	Western Digital Corporation 2021 Long-Term Incentive Plan Non-Employee Director Restricted Stock Unit Grant Program, as amended November 22, 2021 (Filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)*
10.4	Western Digital Corporation Amended and Restated 2005 Employee Stock Purchase Plan, as amended August 2, 2018 (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)*
10.5	SanDisk Corporation 2013 Incentive Plan (Filed as Exhibit 4.1 to the Company's Registration Statement on Form S-8 (File No. 333-211420) with the Securities and Exchange Commission on May 17, 2016)*

Exhibit Number	Description
10.6	Amended and Restated Deferred Compensation Plan, amended and restated effective January 1, 2013 (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 2, 2012)*
10.7	Western Digital Corporation Amended and Restated Change in Control Severance Plan, amended and restated as of May 24, 2021 (Filed as Exhibit 10.6 to the Company's Annual Report on Form 10-K (File No. 1-08703) with the Securities and Exchange Commission on August 27, 2021)*
10.8	Western Digital Corporation Amended and Restated Executive Severance Plan, amended and restated as of May 24, 2021 (Filed as Exhibit 10.7 to the Company's Annual Report on Form 10-K (File No. 1-08703) with the Securities and Exchange Commission on August 27, 2021)*
10.9	Form of Indemnity Agreement for Directors of Western Digital Corporation (Filed as Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 8, 2002)*
10.10	Form of Indemnity Agreement for Officers of Western Digital Corporation (Filed as Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 8, 2002)*
10.11	Form of Indemnification Agreement entered into between SanDisk Corporation and its directors and officers (Filed as Exhibit 10.10 to the Company's Annual Report on Form 10-K (File No. 1-08703) with the Securities and Exchange Commission on August 24, 2018)*
10.12	Offer Letter, dated as of February 18, 2020, to David Goeckeler (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on May 8, 2020)*
10.13	Special Retention Agreement, dated as of August 26, 2019, with Michael C. Ray (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on November 6, 2020)*
10.14	Offer Letter, dated as of December 14, 2021, to Wissam Jabre (Filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on May 4, 2022)*
10.15	Letter Agreement, by and among Western Digital Corporation and Elliott Investment Management L.P., dated June 7, 2022 (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 June 8, 2022)
10.16	Restatement Agreement, dated January 7, 2022, by and among Western Digital Corporation, JPMorgan Chase Bank. N.A., as administrative agent, and the lenders party thereto (Filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on May 4, 2022)*
10.17	Flash Alliance, Master Agreement dated as of July 7, 2006, by and among SanDisk Corporation, Toshiba Corporation and SanDisk (Ireland) Limited (Filed as Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)##
10.18	Operating Agreement of Flash Alliance, Ltd., dated as of July 7, 2006, by and between Toshiba Corporation and SanDisk (Ireland) Limited (Filed as Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 3, 2022)##
10.19	Joint Venture Restructure Agreement, dated as of January 29, 2009, by and among SanDisk Corporation, SanDisk (Ireland) Limited, SanDisk (Cayman) Limited, Toshiba Corporation, Flash Partners Limited and Flash Alliance Limited (Filed as Exhibit 10.1 to SanDisk Corporation's Quarterly Report on Form 10-Q (File No. 000-26734) with the Securities and Exchange Commission on May 7, 2009)#
10.20	New Y2 Facility Agreement, dated October 20, 2015, by and among SanDisk Corporation, SanDisk (Ireland) Limited, SanDisk (Cayman) Limited, SanDisk Flash B.V., Toshiba Corporation, Flash Partners Limited, Flash Alliance Limited and Flash Forward Limited (Filed as Exhibit 10.37 to SanDisk Corporation's Annual Report on Form 10-K (File No. 000-26734) with the Securities and Exchange Commission on February 12, 2016)#
10.21	FAL Commitment and Extension Agreement, dated as of December 12, 2017, by and among Western Digital Corporation, SanDisk LLC, SanDisk (Ireland) Limited and Toshiba Memory Corporation (Filed as Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 6, 2018)#
10.22	Y6 Facility Agreement, dated as of December 12, 2017, by and among Western Digital Corporation, SanDisk LLC, SanDisk (Cayman) Limited, SanDisk (Ireland) Limited, SanDisk Flash B.V., Flash Partners, Ltd., Flash Alliance, Ltd., Flash Forward, Ltd. and Toshiba Memory Corporation (Filed as Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 6, 2018)#
10.23	K1 Facility Agreement, dated as of May 15, 2019, by and among Western Digital, SanDisk LLC, SanDisk (Cayman) Limited, SanDisk (Ireland) Limited, SanDisk Flash B.V., Flash Partners, Ltd., Flash Alliance, Ltd., Flash Forward Ltd., Toshiba Memory Corporation and Toshiba Memory Corporation Iwate (Filed as Exhibit 10.21 to the Company's Annual Report on Form 10-K (File No. 1-08703) with the Securities and Exchange Commission on August 27, 2019)##

Exhibit Number	Description				
10.24	Confidential Settlement and Mutual Release Agreement, dated as of December 12, 2017, by and among Western Digital Corporation, SanDisk LLC, SanDisk (Cayman) Limited, SanDisk (Ireland) Limited, SanDisk Flash B.V., Toshiba Corporation and Toshiba Memory Corporation (Filed as Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 6, 2018)#				
10.25	Confidential Settlement and Mutual Release Agreement, dated as of December 12, 2017, by and among Western Digital Corporation, SanDisk LLC, SanDisk (Cayman) Limited, SanDisk (Ireland) Limited, SanDisk Flash B.V., Bain Capital Private Equity, L.P., BCPE Pangea Cayman, L.P., BCPE Pangea Cayman2, Ltd., Bain Capital Fund XII, L.P., Bain Capital Asia Fund III, L.P. and K.K. Pangea (Filed as Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q (File No. 1-08703) with the Securities and Exchange Commission on February 6, 2018)#				
10.26	Flash Forward Master Agreement, dated as of July 13, 2010, entered into by and among, on one side, Toshiba Corporation and, on the other side, SanDisk Corporation, and SanDisk Flash B.V.†##				
10.27	Operating Agreement of Flash Forward, Ltd, dated as of March 1, 2011, between Toshiba Corporation and SanDisk Flash B.V.†##				
10.28	FFL Commitment and Extension Agreement, dated as of December 12, 2017, by and among Toshiba Memory Corporation, Western Digital Corporation, SanDisk LLC and SanDisk Flash B.V.†##				
10.29	FFL Second Commitment and Extension Agreement, dated as of May 15, 2019, by and among Toshiba Memory Corporation, Toshiba Memory Iwate Corporation, Western Digital Corporation, SanDisk LLC, SanDisk (Cayman) Limited, SanDisk (Ireland) Limited, SanDisk Flash B.V., Flash Partners, Ltd., Flash Alliance, Ltd., and Flash Forward, Ltd.†##				
21	Subsidiaries of Western Digital Corporation†				
23	Consent of Independent Registered Public Accounting Firm†				
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 - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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†				
104	Cover Page Interactive Data File - formatted in Inline XBRL and contained in Exhibit 101				

[†] Filed with this report.

Item 16. Form 10-K Summary

None.

^{**} Furnished 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.

Pursuant to a request for confidential treatment, certain portions of this exhibit have been redacted from the publicly filed document and have been furnished separately to the Securities and Exchange Commission as required by Rule 24b-2 under the Securities Exchange Act of 1934, as amended.

^{##} As permitted by Regulation S-K, Item 601(b)(10)(iv) of the Securities Exchange Act of 1934, as amended, certain confidential portions of this exhibit have been redacted from the publicly filed document.

SIGNATURES

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

WESTERN DIGITAL CORPORATION

By: /s/ Gene Zamiska

Gene Zamiska

Senior Vice President, Global Accounting and Chief Accounting Officer

(Principal Accounting Officer)

Dated: August 24, 2022

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ David V. Goeckeler David V. Goeckeler	Chief Executive Officer, Director (Principal Executive Officer)	August 24, 2022
/s/ Wissam Jabre Wissam Jabre	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	August 24, 2022
/s/ Gene Zamiska Gene Zamiska	Senior Vice President, Global Accounting and Chief Accounting Officer (Principal Accounting Officer)	August 24, 2022
/s/ Matthew E. Massengill Matthew E. Massengill	Chairman of the Board	August 24, 2022
/s/ Kimberly E. Alexy Kimberly E. Alexy	Director	August 24, 2022
/s/ Thomas Caulfield Thomas Caulfield	Director	August 24, 2022
/s/ Martin I. Cole Martin I. Cole	Director	August 24, 2022
/s/ Tunç Doluca Tunç Doluca	Director	August 24, 2022
/s/ Paula A. Price Paula A. Price	Director	August 24, 2022
/s/ Stephanie A. Streeter Stephanie A. Streeter	Director	August 24, 2022
/s/ Miyuki Suzuki Miyuki Suzuki	Director	August 24, 2022