



NVIDIA Annual Report 2023

Form 10-K (NASDAQ:NVDA)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended January 29, 2023

OR

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

Commission file number: 0-23985



NVIDIA CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
Incorporation or Organization)

94-3177549
(I.R.S. Employer
Identification No.)

2788 San Tomas Expressway
Santa Clara, California 95051
(408) 486-2000

(Address, including zip code, and telephone number, including area code, of principal executive offices)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	NVDA	The Nasdaq Global Select Market

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 29, 2022 was approximately \$434.37 billion (based on the closing sales price of the registrant's common stock as reported by the Nasdaq Global Select Market on July 29, 2022). This calculation excludes 98 million shares held by directors and executive officers of the registrant. This calculation does not exclude shares held by such organizations whose ownership exceeds 5% of the registrant's outstanding common stock that have represented to the registrant that they are registered investment advisers or investment companies registered under section 8 of the Investment Company Act of 1940.

The number of shares of common stock outstanding as of February 17, 2023 was 2.47 billion.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for its 2023 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K are incorporated by reference into Part III, Items 10-14 of this Annual Report on Form 10-K.

**NVIDIA CORPORATION
TABLE OF CONTENTS**

	Page
	<hr/>
<u>PART I</u>	
<u>Item 1. Business</u>	<u>4</u>
<u>Item 1A. Risk Factors</u>	<u>15</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>33</u>
<u>Item 2. Properties</u>	<u>33</u>
<u>Item 3. Legal Proceedings</u>	<u>34</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>34</u>
<u>PART II</u>	
<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>34</u>
<u>Item 6. [Reserved]</u>	<u>35</u>
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>36</u>
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>46</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>47</u>
<u>Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	<u>47</u>
<u>Item 9A. Controls and Procedures</u>	<u>47</u>
<u>Item 9B. Other Information</u>	<u>48</u>
<u>Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	<u>48</u>
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>48</u>
<u>Item 11. Executive Compensation</u>	<u>49</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>49</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>50</u>
<u>Item 14. Principal Accountant Fees and Services</u>	<u>50</u>
<u>PART IV</u>	
<u>Item 15. Exhibit and Financial Statement Schedules</u>	<u>51</u>
<u>Item 16. Form 10-K Summary</u>	<u>90</u>
<u>Signatures</u>	<u>91</u>

WHERE YOU CAN FIND MORE INFORMATION

Investors and others should note that we announce material financial information to our investors using our investor relations website, press releases, SEC filings and public conference calls and webcasts. We also use the following social media channels as a means of disclosing information about the company, our products, our planned financial and other announcements and attendance at upcoming investor and industry conferences, and other matters and for complying with our disclosure obligations under Regulation FD:

NVIDIA Twitter Account (<https://twitter.com/nvidia>)

NVIDIA Corporate Blog (<http://blogs.nvidia.com>)

NVIDIA Facebook Page (<https://www.facebook.com/nvidia>)

NVIDIA LinkedIn Page (<http://www.linkedin.com/company/nvidia>)

NVIDIA Instagram Page (<https://www.instagram.com/nvidia>)

In addition, investors and others can view NVIDIA videos on YouTube (<https://www.YouTube.com/nvidia>).

The information we post through these social media channels may be deemed material. Accordingly, investors should monitor these accounts and the blog, in addition to following our press releases, SEC filings and public conference calls and webcasts. This list may be updated from time to time. The information we post through these channels is not a part of this Annual Report on Form 10-K. These channels may be updated from time to time on NVIDIA's investor relations website.

Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements which are based on our management's beliefs and assumptions and on information currently available to our management. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "goal," "would," "expect," "plan," "anticipate," "believe," "estimate," "project," "predict," "potential" and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results, performance, time frames or achievements to be materially different from any future results, performance, time frames or achievements expressed or implied by the forward-looking statements. We discuss many of these risks, uncertainties and other factors in this Annual Report on Form 10-K in greater detail under the heading "Risk Factors." Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this filing. You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify our forward-looking statements by these cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

All references to "NVIDIA," "we," "us," "our" or the "Company" mean NVIDIA Corporation and its subsidiaries.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the filing date of this Annual Report on Form 10-K, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

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PART I

ITEM 1. BUSINESS

Our Company

NVIDIA pioneered accelerated computing to help solve the most challenging computational problems. Since our original focus on PC graphics, we have expanded to several other large and important computationally intensive fields. Fueled by the sustained demand for exceptional 3D graphics and the scale of the gaming market, NVIDIA has leveraged its GPU architecture to create platforms for scientific computing, artificial intelligence, or AI, data science, autonomous vehicles, or AV, robotics, metaverse and 3D internet applications.

The GPU was initially used to simulate human imagination, enabling the virtual worlds of video games and films. Today, it also simulates human intelligence, enabling a deeper understanding of the physical world. Its parallel processing capabilities, supported by thousands of computing cores, are essential to running deep learning algorithms. This form of AI, in which software writes itself by learning from large amounts of data, can serve as the brain of computers, robots and self-driving cars that can perceive and understand the world. GPU-powered deep learning is being adopted by thousands of enterprises to deliver services and products that would have been immensely difficult with traditional coding. Some of the most recent applications of GPU-powered deep learning include recommendation systems, which are AI algorithms trained to understand the preferences, previous decisions, and characteristics of people and products using data gathered about their interactions, large language models, which can recognize, summarize, translate, predict and generate text and other content based on knowledge gained from massive datasets, and generative AI, which uses algorithms that create new content, including audio, code, images, text, simulations, and videos, based on the data they have been trained on.

NVIDIA has a platform strategy, bringing together hardware, systems, software, algorithms, libraries, and services to create unique value for the markets we serve. While the computing requirements of these end markets are diverse, we address them with a unified underlying architecture leveraging our GPUs and software stacks. The programmable nature of our architecture allows us to support several multi-billion-dollar end markets with the same underlying technology by using a variety of software stacks developed either internally or by third-party developers and partners. The large and growing number of developers across our platforms strengthens our ecosystem and increases the value of our platform to our customers.

Innovation is at our core. We have invested over \$37 billion in research and development since our inception, yielding inventions that are essential to modern computing. Our invention of the GPU in 1999 defined modern computer graphics and established NVIDIA as the leader in computer graphics. With our introduction of the CUDA programming model in 2006, we opened the parallel processing capabilities of our GPU for general purpose computing. This approach significantly accelerates the most demanding high-performance computing, or HPC, applications in fields such as aerospace, bio-science research, mechanical and fluid simulations, and energy exploration. Today, our GPUs and networking accelerate many of the fastest supercomputers across the world. In addition, the massively parallel compute architecture of our GPUs and associated software are well suited for deep learning and machine learning, powering the era of AI. While traditional CPU-based approaches no longer deliver advances on the pace described by Moore's Law, NVIDIA accelerated computing delivers performance improvements on a pace ahead of Moore's Law, giving the industry a path forward.

Gamers choose NVIDIA GPUs to enjoy immersive, increasingly cinematic virtual worlds. GPUs also help underpin the world's fastest growing spectator sport, eSports, which attracts hundreds of millions of viewers to watch top-quality live video gaming. In addition to serving the growing number of gamers, the market for gaming GPUs is expanding because of the burgeoning population of live streamers, broadcasters, artists and creators.

Researchers and developers use our GPUs to accelerate a wide range of important applications, from simulating molecular dynamics to climate forecasting. With support for more than 2,800 applications - including 23 of the top 25 HPC applications - NVIDIA GPUs enable some of the most promising areas of discovery, from climate prediction to materials science and from wind tunnel simulation to genomics. Including GPUs and networking, NVIDIA powers over 70% of the supercomputers on the global TOP500 list, including 23 of the top 30 systems on the Green500 list.

The world's leading cloud service providers, or CSPs, and consumer internet companies use our GPUs and broader data center-scale accelerated computing platforms to enable, accelerate or enrich the services they deliver to billions of end-users, including search, recommendations, social networking, online shopping, live video, translation, AI assistants, navigation, and cloud computing.

A rapidly growing number of enterprises and startups across a broad range of industries use our GPUs and software to bring automation to the products and services they build. The transportation industry is turning to our platforms for autonomous driving; the healthcare industry is leveraging them for enhanced medical imaging and acceleration of drug discovery; and the financial services industry is using them for fraud detection.

Professional designers use our GPUs and software to create visual effects in movies and to design buildings and products ranging from cell phones to commercial aircraft.

Headquartered in Santa Clara, California, NVIDIA was incorporated in California in April 1993 and reincorporated in Delaware in April 1998.

Termination of the Arm Share Purchase Agreement

In February 2022, NVIDIA and SoftBank Group Corp., or SoftBank, announced the termination of the Share Purchase Agreement whereby NVIDIA would have acquired Arm Limited, or Arm, from SoftBank. The parties agreed to terminate because of significant regulatory challenges preventing the completion of the transaction. We recorded an acquisition termination cost of \$1.35 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

Our Businesses

We report our business results in two segments.

The Compute & Networking segment includes our Data Center accelerated computing platform; networking; automotive AI Cockpit, autonomous driving development agreements, and autonomous vehicle solutions; electric vehicle computing platforms; Jetson for robotics and other embedded platforms; NVIDIA AI Enterprise and other software; and cryptocurrency mining processors, or CMP.

The Graphics segment includes GeForce GPUs for gaming and PCs, the GeForce NOW game streaming service and related infrastructure, and solutions for gaming platforms; Quadro/NVIDIA RTX GPUs for enterprise workstation graphics; virtual GPU, or vGPU, software for cloud-based visual and virtual computing; automotive platforms for infotainment systems; and Omniverse Enterprise software for building and operating metaverse and 3D internet applications.

Our Markets

We specialize in markets in which our computing platforms can provide tremendous acceleration for applications. These platforms incorporate processors, interconnects, software, algorithms, systems, and services to deliver unique value. Our platforms address four large markets where our expertise is critical: Data Center, Gaming, Professional Visualization, and Automotive.

Data Center

The NVIDIA computing platform is focused on accelerating the most compute-intensive workloads, such as AI, data analytics, graphics and scientific computing, across hyperscale, cloud, enterprise, public sector, and edge data centers. The platform consists of our energy efficient GPUs, data processing units, or DPUs, interconnects and systems, our CUDA programming model, and a growing body of software libraries, software development kits, or SDKs, application frameworks and services, which are either available as part of the platform or packaged and sold separately.

For both AI and HPC applications, the NVIDIA accelerated computing platform greatly increases computer and data center performance and power efficiency relative to conventional CPU-only approaches. In the field of AI, NVIDIA's platform accelerates both deep learning and machine learning workloads. Deep learning is a computer science approach where neural networks are trained to recognize patterns from massive amounts of data in the form of images, sounds and text - in some instances better than humans - and in turn provide predictions in production use cases. Machine learning is a related approach that leverages algorithms as well

as data to learn how to make determinations or predictions. HPC, which includes scientific computing, uses numerical computational approaches to solve large and complex problems.

We are engaged with thousands of organizations working on AI in a multitude of industries, from automating tasks such as consumer product and service recommendations, to chatbots for the automation of or assistance with live customer interactions, to enabling fraud detection in financial services, to optimizing oil exploration and drilling. These organizations include the world's leading consumer internet and cloud services companies, enterprises and startups seeking to implement AI in transformative ways across multiple industries. We partner with industry leaders to help transform their applications or their computing platforms. We also have partnerships in transportation, retail, healthcare, and manufacturing, among others, to accelerate the adoption of AI.

At the foundation of the NVIDIA accelerated computing platform are our GPUs, which excel at parallel workloads such as the training and inferencing of neural networks. They are available in industry standard servers from every major computer maker and CSP, as well as in our DGX AI supercomputer, a purpose-built system for deep learning and GPU accelerated applications. To facilitate customer adoption, we have also built other ready-to-use system reference designs around our GPUs, including HGX for hyperscale and supercomputing data centers, EGX for enterprise and edge computing, IGX for high-precision edge AI, and AGX for autonomous machines.

In fiscal year 2023, we introduced the Hopper architecture of data center GPUs, and started shipping the first Hopper-based GPU – the flagship H100. Hopper includes a Transformer Engine, designed to accelerate the training of AI transformer models by an order of magnitude over the prior generation. H100 is ideal for accelerating applications such as large language models, deep recommender systems, genomics and complex digital twins.

NVIDIA will offer enterprise customers NVIDIA AI cloud services directly and through our network of partners. Examples of these services include NVIDIA DGX Cloud, which is cloud-based infrastructure and software for training AI models, and customizable pretrained AI models. NVIDIA has partnered with leading cloud service providers to host these services in their data centers.

Our networking solutions include InfiniBand and Ethernet network adapters and switches, related software, and cables. This has enabled us to architect end-to-end data center-scale computing platforms that can interconnect thousands of compute nodes with high-performance networking. While historically the server was the unit of computing, as AI and HPC workloads have become extremely large spanning thousands of compute nodes, the data center has become the new unit of computing, with networking as an integral part.

Beyond GPUs, NVIDIA has expanded its data center processor portfolio to include DPUs, currently shipping in the market, and CPUs with samples planned to ship in the first half of fiscal year 2024. The NVIDIA Bluefield DPU is supported by foundational data-center-infrastructure-on-a-chip software, or DOCA, that lets developers build software-defined, hardware-accelerated networking, security, storage and management applications for BlueField DPUs. Partners supporting Bluefield include many of the top security, storage and networking companies. We can optimize across the entire computing, networking and storage stack to deliver data center-scale computing solutions. The Grace CPU is designed for AI infrastructure and high-performance computing, providing the highest performance and twice the memory bandwidth and energy-efficiency compared to today's leading server chips.

While our approach starts with powerful chips, what makes it a full-stack computing platform is our large body of software, including the CUDA parallel programming model, the CUDA-X collection of application acceleration libraries, Application Programming Interfaces, or APIs, SDKs and tools, and domain-specific application frameworks. We also offer the NVIDIA GPU Cloud registry, or NGC, a comprehensive catalog of easy-to-use, optimized software stacks across a range of domains including scientific computing, deep learning, and machine learning. With NGC, AI developers, researchers and data scientists can get started with the development of AI and HPC applications and deploy them on DGX systems, NVIDIA-Certified systems from our partners, or with NVIDIA's cloud partners.

In addition to software that is delivered to customers as an integral part of our data center computing platform, we offer paid licenses to NVIDIA AI Enterprise, a comprehensive suite of enterprise-grade AI software; and NVIDIA vGPU software for graphics-rich virtual desktops and workstations.

Gaming

Gaming is the largest entertainment industry, with PC gaming as the predominant platform. Many factors propel computer gaming's growth, including new high production value games and franchises, the continued rise of competitive gaming or eSports, social connectivity and the increasing popularity of game streamers, modders, or gamers who create game modifications, and creators.

Our gaming platforms leverage our GPUs and sophisticated software to enhance the gaming experience with smoother, higher quality graphics. We developed NVIDIA RTX to bring next generation graphics and AI to games. NVIDIA RTX features ray tracing technology for real-time, cinematic-quality rendering. Ray tracing, which has long been used for special effects in the movie industry, is a computationally intensive technique that simulates the physical behavior of light to achieve greater realism in computer-generated scenes. NVIDIA RTX also features deep learning super sampling, or NVIDIA DLSS, our AI technology that boosts frame rates while generating beautiful, sharp images for games.

Our products for the gaming market include GeForce RTX and GeForce GTX GPUs for gaming desktop and laptop PCs, GeForce NOW cloud gaming for playing PC games on underpowered devices, SHIELD for high quality streaming on TV, as well as system-on-chips (SOCs) and development services for game consoles.

In fiscal year 2023, we introduced the GeForce RTX 40 Series of gaming GPUs, based on the Ada Lovelace architecture. The 40 Series features our third generation RTX technology, third generation NVIDIA DLSS, and fourth generation Tensor Cores to deliver up to 4X the performance of the previous generation.

Professional Visualization

We serve the Professional Visualization market by working closely with independent software vendors, or ISVs, to optimize their offerings for NVIDIA GPUs. Our GPU computing platform enhances productivity and introduces new capabilities for critical workflows in many fields, such as design and manufacturing and digital content creation. Design and manufacturing encompass computer-aided design, architectural design, consumer-products manufacturing, medical instrumentation, and aerospace. Digital content creation includes professional video editing and post-production, special effects for films, and broadcast-television graphics.

The NVIDIA RTX platform makes it possible to render film-quality, photorealistic objects and environments with physically accurate shadows, reflections and refractions using ray tracing in real-time. Many leading 3D design and content creation applications developed by our ecosystem partners now support RTX, allowing professionals to accelerate and transform their workflows with NVIDIA RTX GPUs and software.

Digital images used in product design need to mirror reality. This requires simulating the physical behavior of light and materials, or physically-based rendering. NVIDIA Omniverse is a virtual world simulation and collaboration platform for 3D workflows, such as building and operating metaverse and 3D internet applications, available as a software subscription for enterprise use and free for individual use. Omniverse, virtual reality, or VR, and augmented reality, or AR, are being incorporated in a growing number of enterprise applications. Virtual car showrooms, surgical training, architectural walkthroughs, and bringing historical scenes to life all deploy these technologies, powered by our GPUs.

Automotive

NVIDIA's Automotive market is comprised of AV, AI cockpit, electric vehicle computing platforms, and infotainment platform solutions. Leveraging our technology leadership in AI and building on our long-standing automotive relationships, we are delivering a complete end-to-end solution for the AV market under the DRIVE Hyperion brand. NVIDIA has demonstrated multiple applications of AI within the car: AI can drive the car itself as a pilot in fully autonomous mode or it can also be a co-pilot, assisting the human driver while creating a safer driving experience.

NVIDIA is working with several hundred partners in the automotive ecosystem including automakers, truck makers, tier-one suppliers, sensor manufacturers, automotive research institutions, HD mapping companies, and startups to develop and deploy AI systems for self-driving vehicles. Our unified AI computing architecture starts with training deep neural networks using our GPUs, and then running a full perception, fusion, planning and control stack within the vehicle on the NVIDIA DRIVE Hyperion platform. The DRIVE Hyperion platform consists of the high-performance, energy efficient DRIVE AGX computing hardware, a reference sensor set that supports full self-driving capability as well as an open, modular DRIVE Software

platform. The DRIVE Software platform includes DRIVE Chauffeur for autonomous driving, mapping and parking services, Drive Concierge for intelligent in-vehicle experiences, and real time conversational AI capability based on NVIDIA Omniverse Avatar software.

In addition, we offer a scalable data center-based simulation solution, NVIDIA DRIVE Sim, based on NVIDIA Omniverse software, for digital cockpit development, as well as for testing and validating a self-driving platform. NVIDIA's unique end-to-end, software-defined approach is designed for continuous innovation and continuous development, enabling cars to receive over-the-air updates to add new features and capabilities throughout the life of a vehicle.

Business Strategies

NVIDIA's key strategies that shape our overall business approach include:

Advancing the NVIDIA accelerated computing platform. NVIDIA's accelerated computing platform can solve complex problems in significantly less time and with lower power consumption than alternative computational approaches. Indeed, it can help solve problems that were previously deemed unsolvable. We work to deliver continued performance leaps that outpace Moore's Law by leveraging innovation across the architecture, chip design, system, interconnect, and software layers. This full-stack innovation approach allows us to deliver order-of-magnitude performance advantages relative to legacy approaches in our target markets, which include Data Center, Gaming, Professional Visualization, and Automotive. While the computing requirements of these end markets are diverse, we address them with a unified underlying architecture leveraging our GPUs, CUDA and networking technologies as the fundamental building blocks. The programmable nature of our architecture allows us to make leveraged investments in research and development: we can support several multi-billion-dollar end markets with shared underlying technology by using a variety of software stacks developed either internally or by third-party developers and partners. We utilize this platform approach in each of our target markets.

Extending our technology and platform leadership in AI. We provide a complete, end-to-end accelerated computing platform for deep learning and machine learning, addressing both training and inferencing. This includes GPUs, interconnects, systems, our CUDA programming language, algorithms, libraries, and other software. GPUs are uniquely suited to AI, and we will continue to add AI-specific features to our GPU architecture to further extend our leadership position. Our AI technology leadership is reinforced by our large and expanding ecosystem in a virtuous cycle. Our GPU platforms are available from virtually every major server maker and CSP, as well as on our own AI supercomputer. There are 3.8 million developers worldwide using CUDA and our other software tools to help deploy our technology in our target markets. We evangelize AI through partnerships with hundreds of universities and over 13,000 startups through our Inception program. Additionally, our Deep Learning Institute provides instruction on the latest techniques on how to design, train, and deploy neural networks in applications using our accelerated computing platform.

Extending our technology and platform leadership in computer graphics. We believe that computer graphics is fundamental to the continued expansion and evolution of computing. We apply our research and development resources to enhance the user experience for consumer entertainment and professional visualization applications, and create new virtual world and simulation capabilities. Our technologies are instrumental in driving gaming forward, as developers leverage our libraries and algorithms to deliver an optimized gaming experience on our GeForce platform. Our computer graphics platforms leverage not only our industry-leading GeForce and NVIDIA RTX GPUs, but also optimized software stacks. For example, GeForce Experience enhances each gamer's experience by optimizing their PC's settings, as well as enabling the recording and sharing of gameplay. Our Studio drivers enhance and accelerate a number of popular creative applications. Omniverse is real-time 3D design collaboration and virtual world simulation software that empowers artists, designers and creators to connect and collaborate in leading design applications. We also enable interactive graphics applications - such as games, movie and photo editing and design software - to be accessed by almost any device, almost anywhere, through our cloud platforms such as vGPU for enterprise and GeForce NOW for gaming.

Advancing the leading autonomous vehicle platform. We believe the advent of AV will soon revolutionize the transportation industry. In our view, AI is the key technology enabler of this opportunity, as the algorithms required for autonomous driving - such as perception, localization, and planning - are too complex for legacy hand-coded approaches and will use multiple trained neural networks instead. Therefore, we provide a full functionally safe AI-based hardware and software solution for the AV market under the DRIVE brand, which we are bringing to market through our partnerships with automotive original equipment manufacturers, or

OEMs, tier-1 suppliers, and start-ups. Our AV solution also includes the GPU-based hardware required to train the neural networks before their in-vehicle deployment, as well as to re-simulate their operation prior to any over-the-air software updates. We believe our comprehensive, top-to-bottom and end-to-end approach will enable the transportation industry to solve the complex problems arising from the shift to autonomous driving.

Leveraging our intellectual property, or IP. We believe our IP is a valuable asset that can be accessed by our customers and partners through license and development agreements when they desire to build such capabilities directly into their own products, or have us do so through a custom development. Such license and development arrangements can further enhance the reach of our technology.

Sales and Marketing

Our worldwide sales and marketing strategy is key to achieving our objective of providing markets with our high-performance and efficient computing platforms and software. Our sales and marketing teams, located across our global markets, work closely with end customers and various industry ecosystems through our partner network. Our partner network incorporates each industry's respective OEMs, original device manufacturers, or ODMs, system builders, add-in board manufacturers, or AIBs, retailers/distributors, ISVs, internet and CSPs, automotive manufacturers and tier-1 automotive suppliers, mapping companies, start-ups, and other ecosystem participants.

Members of our sales team have technical expertise and product and industry knowledge. We also employ a team of application engineers and solution architects to assist our partner network in designing, testing, and qualifying system designs that incorporate our platforms. We believe that the depth and quality of our design support are key to improving our partner network's time-to-market, maintaining a high level of customer satisfaction, and fostering relationships that encourage our end customers and partner network to use the next generation of our products within each platform.

To encourage the development of applications optimized for our platforms and software, we seek to establish and maintain strong relationships in the software development community. Engineering and marketing personnel engage with key software developers to promote and discuss our platforms, as well as to ascertain individual product requirements and solve technical problems. Our developer program makes our products available to developers prior to launch in order to encourage the development of AI frameworks, SDKs, and APIs for software applications and game titles that are optimized for our platforms. Our Deep Learning Institute provides in-person and online training for developers in industries and organizations around the world to build AI and accelerated computing applications that leverage our platforms.

As NVIDIA's business has evolved from a focus primarily on gaming products to broader markets, and from chips to platforms, systems and software, so, too, have our avenues to market. Thus, in addition to sales to customers in our partner network, certain of our products are also sold direct to CSPs, enterprise customers, retail channels and consumers.

Seasonality

Our computing platforms serve a diverse set of markets such as consumer gaming, enterprise and cloud data centers, professional workstations, and automotive. Our consumer products typically see stronger revenue in the second half of our fiscal year. In addition, based on the production schedules of key customers, some of our products for notebooks and game consoles typically generate stronger revenue in the second and third quarters, and weaker revenue in the fourth and first quarters. In fiscal year 2023, our supply exceeded our demand in several areas, and our revenue did not follow historical seasonal patterns. Historical seasonality trends may not repeat.

Manufacturing

We do not manufacture semiconductors used for our products. Instead, we utilize a fabless manufacturing strategy, whereby we employ key suppliers for all phases of the manufacturing process, including wafer fabrication, assembly, testing, and packaging. This strategy uses the expertise of industry-leading suppliers that are certified by the International Organization for Standardization in such areas as fabrication, assembly, quality control and assurance, reliability, and testing. Additionally, we can avoid many of the significant costs and risks associated with owning and operating manufacturing operations. While we may directly procure certain raw materials used in the production of our products, such as memory, substrates and a variety of components, our suppliers are responsible for procurement of most of the raw materials used in the

production of our products. As a result, we can focus our resources on product design, additional quality assurance, marketing, and customer support. We have placed non-cancellable inventory orders for certain product components in advance of our historical lead times, paid premiums and provided deposits to secure future supply and capacity and may need to continue to do so in the future.

We have expanded our supplier relationships to build redundancy and resilience in our operations. We utilize suppliers, such as Taiwan Semiconductor Manufacturing Company Limited and Samsung Electronics Co. Ltd, to produce our semiconductor wafers. We then utilize independent subcontractors and contract manufacturers, such as Amkor Technology, BYD Auto Co. Ltd., or BYD Auto, Hon Hai Precision Industry Co., or Hon Hai, King Yuan Electronics Co., Ltd., Omni Logistics, LLC, Siliconware Precision Industries Company Ltd., and Wistron Corporation to perform assembly, testing, and packaging of most of our products and platforms. We use contract manufacturers such as Flex Ltd., Jabil Inc., and Universal Scientific Industrial Co., Ltd., to manufacture our standard and custom adapter card products and switch systems, and Fabrinet to manufacture our networking cables. We purchase substrates from Ibiden Co. Ltd., Kinsus Interconnect Technology Corporation, and Unimicron Technology Corporation, and memory from Micron Technology, Samsung Semiconductor, Inc., or Samsung, and SK Hynix. We often consign key components or materials such as the GPU, SoC, memory, and integrated circuit to the contract manufacturers.

We typically receive semiconductor products from our subcontractors, perform incoming quality assurance and configuration using test equipment purchased from industry-leading suppliers such as Advantest America Inc. and Chroma ATE Inc., and then ship the semiconductors to contract manufacturers, such as BYD Auto and Hon Hai, distributors, motherboard and add-in card, or AIC, customers from our third-party warehouses in Hong Kong, Israel, and the United States. Generally, these manufacturers assemble and test the boards based on our design kit and test specifications, and then ship our products to retailers, system builders, or OEMs as motherboard and AIC solutions.

Competition

The market for our products is intensely competitive and is characterized by rapid technological change and evolving industry standards. We believe that the principal competitive factors in this market are performance, breadth of product offerings, access to customers and partners and distribution channels, software support, conformity to industry standard APIs, manufacturing capabilities, processor pricing, and total system costs. We believe that our ability to remain competitive will depend on how well we are able to anticipate the features and functions that customers and partners will demand and whether we are able to deliver consistent volumes of our products at acceptable levels of quality and at competitive prices. We expect competition to increase from both existing competitors and new market entrants with products that may be lower priced than ours or may provide better performance or additional features not provided by our products. In addition, it is possible that new competitors or alliances among competitors could emerge and acquire significant market share.

A significant source of competition comes from companies that provide or intend to provide GPUs, CPUs, DPUs, embedded SoCs, and other accelerated, AI computing processor products, and providers of semiconductor-based high-performance interconnect products based on InfiniBand, Ethernet, Fibre Channel and proprietary technologies. Some of our competitors may have greater marketing, financial, distribution and manufacturing resources than we do and may be more able to adapt to customer or technological changes. We expect an increasingly competitive environment in the future.

Our current competitors include:

- suppliers and licensors of hardware and software for discrete and integrated GPUs, custom chips and other accelerated computing solutions, including solutions offered for AI, such as Advanced Micro Devices, Inc., or AMD, and Intel Corporation, or Intel;
 - large cloud services companies with internal teams designing chips and software that incorporate accelerated or AI computing functionality as part of their internal solutions or platforms, such as Alibaba Group, Alphabet Inc., Amazon, Inc., and Baidu, Inc.;
 - suppliers of Arm-based CPUs and companies that incorporate CPUs as part of their internal solutions or platforms;
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- suppliers of SoC products that are used in servers or embedded into automobiles, autonomous machines, and gaming devices, such as Ambarella, Inc., AMD, Broadcom Inc., or Broadcom, Intel, Qualcomm Incorporated, Renesas Electronics Corporation, and Samsung, or companies with internal teams designing SoC products for internal use, such as Tesla, Inc.; and
- suppliers of interconnect, switch cable solutions, and DPUs such as AMD, Applied Optoelectronics, Inc., Arista Networks, Broadcom, Cisco Systems, Inc., or Cisco, Hewlett Packard Enterprise Company, Intel, Juniper Networks, Inc., Lumentum Holdings, and Marvell Technology Group, as well as internal teams of system vendors and large cloud services companies.

Patents and Proprietary Rights

We rely primarily on a combination of patents, trademarks, trade secrets, employee and third-party nondisclosure agreements, and licensing arrangements to protect our IP in the United States and internationally. Our currently issued patents have expiration dates from March 2023 to June 2045. We have numerous patents issued, allowed, and pending in the United States and in foreign jurisdictions. Our patents and pending patent applications primarily relate to our products and the technology used in connection with our products. We also rely on international treaties, organizations, and foreign laws to protect our IP. The laws of certain foreign countries in which our products are or may be manufactured or sold, including various countries in Asia, may not protect our products or IP rights to the same extent as the laws of the United States. This decreased protection makes the possibility of piracy of our technology and products more likely. We continuously assess whether and where to seek formal protection for particular innovations and technologies based on such factors as:

- the location in which our products are manufactured;
- our strategic technology or product directions in different countries;
- the degree to which IP laws exist and are meaningfully enforced in different jurisdictions; and
- the commercial significance of our operations and our competitors' operations in particular countries and regions.

We have licensed technology from third parties and expect to continue to enter into such license agreements.

Government Regulations

Our worldwide business activities are subject to various laws, rules, and regulations of the United States as well as of foreign governments.

During the third quarter of fiscal year 2023, the U.S. government announced new license requirements that impact certain exports to China (including Hong Kong and Macau) and Russia of some of our data center products. The impact of the new license requirements is difficult to quantify, and it may be challenging for us to manage our operations and forecast our operating results due to these requirements. Refer to "Item 1A. Risk Factors- Risks Related to Regulatory, Legal, Our Stock and Other Matters" for a discussion of this potential impact.

Additionally, our acquisitions may be subject to government regulatory reviews, and the cost to comply with such regulations or costs incurred where regulatory challenges prevent the completion of an acquisition could have a material impact on our business. In February 2022, we announced the termination of the Share Purchase Agreement by which we would have acquired Arm due to significant regulatory challenges preventing the completion of the transaction. We recorded an acquisition termination cost of \$1.35 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

Compliance with laws, rules, and regulations has not otherwise had a material effect upon our capital expenditures, results of operations, or competitive position and we do not currently anticipate material capital expenditures for environmental control facilities. Compliance with existing or future governmental regulations, including, but not limited to, those pertaining to IP ownership and infringement, taxes, import and export requirements and tariffs, anti-corruption, business acquisitions, foreign exchange controls and cash repatriation restrictions, data privacy requirements, competition and antitrust, advertising, employment, product regulations, cybersecurity, environmental, health and safety requirements, the responsible use of AI,

climate change, cryptocurrency, and consumer laws, could increase our costs, impact our competitive position, and otherwise may have a material adverse impact on our business, financial condition and results of operations in subsequent periods. Refer to “Item 1A. Risk Factors” for a discussion of these potential impacts.

Environmental, Social and Corporate Governance

NVIDIA invents computing technologies that improve lives and address global challenges. Our goal is to integrate sound environmental, social and corporate governance, or ESG, principles and practices into every aspect of the Company. The Nominating and Corporate Governance Committee of our Board of Directors is responsible for reviewing and discussing with management our practices related to ESG. We assess our programs annually in consideration of stakeholder expectations, market trends, and business risks and opportunities. These issues are important for our continued business success and reflect the topics of highest concern to NVIDIA and our stakeholders.

The following section and the Human Capital Management Section below provide an overview of our principles and practices. More information can be found on the Corporate Responsibility section of our website and in our annual Corporate Responsibility Report, or CR Report. Information contained on our website or in our annual CR Report is not incorporated by reference into this or any other report we file with the Securities and Exchange Commission, or the SEC. Refer to “Item 1A. Risk Factors” for a discussion of risks and uncertainties we face related to ESG.

Climate Change

In the area of sustainability, we address our climate impacts across our product lifecycle and assess risks, including current and emerging regulations and market impacts.

In our CR Report published in July 2022, we published metrics related to our environmental impact for fiscal year 2022. Fiscal year 2023 metrics are expected to be published in the first half of fiscal year 2024. There has been no material impact to our capital expenditures, results of operations or competitive position associated with global sustainability regulations, compliance, or costs from sourcing renewable energy. By the end of fiscal year 2025, our goal is to purchase or generate enough renewable energy to match 100% of our global electricity usage for our offices and data centers.

Whether it is creation of technology to power next-generation laptops or designs to support high-performance supercomputers, improving energy efficiency is important in our research, development, and design processes. GPUs are inherently more energy efficient than other forms of computing because they are optimized for throughput, performance per watt, and certain AI workloads. The energy efficiency of our products is evidenced by our continued strong presence on the Green500 list of the most energy-efficient systems. We powered 23 of the top 30 most energy efficient systems, including the top supercomputer, on the November 2022 Green500 list.

We plan to build Earth-2, a digital twin of the Earth on NVIDIA AI and NVIDIA Omniverse platforms. Earth-2 will enable scientists, companies, and policy makers to do ultra-high-resolution predictions of the impact of climate change and explore mitigation and adaptation strategies.

Human Capital Management

We believe that our employees are our greatest assets, and they play a key role in creating long-term value for our stakeholders. As of the end of fiscal year 2023, we had 26,196 employees in 35 countries, 19,532 were engaged in research and development and 6,664 were engaged in sales, marketing, operations, and administrative positions.

To be competitive and execute our business strategy successfully, we must recruit, develop, and retain talented employees, including qualified executives, scientists, engineers, and technical and non-technical staff.

Recruitment

As the demand for global technical talent continues to be competitive, we have grown our technical workforce and have been successful in attracting top talent to NVIDIA. We have attracted strong talent globally with our differentiated hiring strategies for university, professional, executive and diverse recruits. The COVID-19 pandemic created expanded hiring opportunities in new geographies and provided increased

flexibility for employees to work from locations of their choice. Our workforce is about 80% technical and about 50% hold advanced degrees.

Earlier in fiscal year 2023, we slowed our hiring to focus on our current employees and manage costs. We maintain a connection for global talent from universities through on-campus collaborations with professors and student organizations, as well as engagement with technical organizations and participation at industry conferences. Our own employees help to surface top talent, with over 37% of our new hires in fiscal year 2023 coming from employee referrals.

Development and Retention

To support employee development, we provide opportunities to learn on-the-job through training programs, one on one coaching and ongoing feedback. We have a library of live and on-demand learning experiences that include workshops, panel discussions, and speaker forums. We curate learning paths focused on our most common development needs and constantly upgrade our offerings to ensure that our employees are exposed to the most current programs and technologies available. We offer tuition reimbursement programs to subsidize educational programs and advanced certifications. We encourage internal mobility through career coaching that advises employees on developmental activities and internal transfer opportunities. We have implemented specifically designed mentoring and development programs for women and employees from traditionally underrepresented groups to ensure widespread readiness for future advancement.

To evaluate employee sentiment and engagement, we use pulse surveys, a suggestion box, and an anonymous third-party platform. Pulse surveys help us gain insight into employee experience and provide ideas so that we can prioritize areas to take action. The suggestion box is an always-on, interactive tool where employees share their thoughts about making our company a better place to work. The anonymous third-party platform is designed to protect the identity of the reporter and provide a mechanism for reporters to follow an investigation and receive responses.

We want NVIDIA to be a place where people can build their careers over their lifetime. Our employees tend to come and stay. In fiscal year 2023, our overall turnover rate was 5.3%.

Compensation, Benefits, and Well-Being

Our compensation program rewards performance and is structured to encourage employees to invest in the Company's future. Employees receive equity, except where unavailable due to local regulations, that is tied to the value of our stock price and vests over time to retain employees while simultaneously aligning their interests with those of our shareholders.

We offer comprehensive benefits to support our employees' and their families' physical health, well-being and financial health, including 401(k) programs in the U.S., statutory pension programs outside the U.S., our employee stock purchase program, flexible work hours and time off, and programs to address mental health, stress, and time-management challenges. We evaluate our benefit offerings globally and aim to provide comparable support across the regions where we operate. We are committed to providing tailored benefits based on community needs, including assistance for military members, additional mental health benefits, and support for new birth parents, and those who wish to become parents.

Diversity and Inclusion

We believe that diverse teams fuel innovation, and we are committed to creating an inclusive culture that supports all employees.

When recruiting for new talent or managing current talent, we focus on recruiting, developing, and retaining a more diverse workforce with a focus on those historically underrepresented in the technology field, including women, Black/African American, and Hispanic/Latino candidates.

To this end, we have been:

- Partnering with institutions and professional organizations serving historically underrepresented communities;
 - Assigning dedicated recruiting teams to shepherd underrepresented candidates through the interview process;
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- Embedding inclusion recruiting partners throughout the business to help align candidates with internal opportunities;
- Supporting the development of women employees through programs aimed at building a pipeline of future leaders;
- Providing peer support and executive sponsors for nine internal community resource groups;
- Providing training and education to managers and peers on fostering supportive environments and recruiting for diversity;
- Ensuring we have and review a diverse pool of candidates for requisitions; and
- Measuring year over year progress and providing leadership visibility on diversity efforts.

As of the end of fiscal year 2023, our global workforce was 80% male, 19% female, and 1% not declared, with 6% of our workforce in the United States composed of Black or African American and Hispanic or Latino employees.

Health and COVID-19

We supported our people and their families in making their health and safety a top priority during fiscal year 2023 and throughout the COVID-19 pandemic to keep our workforce safe.

Hybrid Working Environment

We support a hybrid work environment, understanding that many employees want the flexibility to work in the office or from home, and make that decision based on the conditions around them at any point in time.

Steps we took to support employees working from home include:

- Home-focused health and well-being programs;
- Learning and development resources on how to work, lead and manage remotely; and
- Opportunities for employees to socially connect with one another virtually.

During fiscal year 2024, we will continue a flexible work environment and have instituted Company-wide “rest days” for employees to recharge.

Information About Our Executive Officers

The following sets forth certain information regarding our executive officers, their ages and positions as of February 17, 2023:

Name	Age	Position
Jen-Hsun Huang	60	President and Chief Executive Officer
Colette M. Kress	55	Executive Vice President and Chief Financial Officer
Ajay K. Puri	68	Executive Vice President, Worldwide Field Operations
Debora Shoquist	68	Executive Vice President, Operations
Timothy S. Teter	56	Executive Vice President and General Counsel

Jen-Hsun Huang co-founded NVIDIA in 1993 and has served as our President, Chief Executive Officer and a member of the Board of Directors since our inception. From 1985 to 1993, Mr. Huang was employed at LSI Logic Corporation, a computer chip manufacturer, where he held a variety of positions including as Director of Coreware, the business unit responsible for LSI's SOC. From 1983 to 1985, Mr. Huang was a microprocessor designer for AMD, a semiconductor company. Mr. Huang holds a B.S.E.E. degree from Oregon State University and an M.S.E.E. degree from Stanford University.

Colette M. Kress joined NVIDIA in 2013 as Executive Vice President and Chief Financial Officer. Prior to NVIDIA, Ms. Kress most recently served as Senior Vice President and Chief Financial Officer of the Business Technology and Operations Finance organization at Cisco Systems, Inc., a networking equipment company, since 2010. At Cisco, Ms. Kress was responsible for financial strategy, planning, reporting and business

development for all business segments, engineering and operations. From 1997 to 2010 Ms. Kress held a variety of positions at Microsoft Corporation, or Microsoft, a software company, including, beginning in 2006, Chief Financial Officer of the Server and Tools division, where Ms. Kress was responsible for financial strategy, planning, reporting and business development for the division. Prior to joining Microsoft, Ms. Kress spent eight years at Texas Instruments Incorporated, a semiconductor company, where she held a variety of finance positions. Ms. Kress holds a B.S. degree in Finance from University of Arizona and an M.B.A. degree from Southern Methodist University.

Ajay K. Puri joined NVIDIA in 2005 as Senior Vice President, Worldwide Sales and became Executive Vice President, Worldwide Field Operations in 2009. Prior to NVIDIA, he held positions in sales, marketing, and general management over a 22-year career at Sun Microsystems, Inc., a computing systems company. Mr. Puri previously held marketing, management consulting, and product development positions at Hewlett-Packard Company, an information technology company, Booz Allen Hamilton Inc., a management and technology consulting company, and Texas Instruments Incorporated. Mr. Puri holds a B.S.E.E. degree from the University of Minnesota, an M.S.E.E. degree from the California Institute of Technology and an M.B.A. degree from Harvard Business School.

Debora Shoquist joined NVIDIA in 2007 as Senior Vice President of Operations and in 2009 became Executive Vice President of Operations. Prior to NVIDIA, Ms. Shoquist served from 2004 to 2007 as Executive Vice President of Operations at JDS Uniphase Corp., a provider of communications test and measurement solutions and optical products for the telecommunications industry. She served from 2002 to 2004 as Senior Vice President and General Manager of the Electro-Optics business at Coherent, Inc., a manufacturer of commercial and scientific laser equipment. Previously, she worked at Quantum Corp., a data protection company, as President of the Personal Computer Hard Disk Drive Division, and at Hewlett-Packard Corp. Ms. Shoquist holds a B.S. degree in Electrical Engineering from Kansas State University and a B.S. degree in Biology from Santa Clara University.

Timothy S. Teter joined NVIDIA in 2017 as Senior Vice President, General Counsel and Secretary and became Executive Vice President, General Counsel and Secretary in February 2018. Prior to NVIDIA, Mr. Teter spent more than two decades at the law firm of Cooley LLP, where he focused on litigating patent and technology related matters. Prior to attending law school, he worked as an engineer at Lockheed Missiles and Space Company, an aerospace company. Mr. Teter holds a B.S. degree in Mechanical Engineering from the University of California at Davis and a J.D. degree from Stanford Law School.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and, if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, are available free of charge on or through our website, <http://www.nvidia.com>, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or the SEC. The SEC's website, <http://www.sec.gov>, contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our web site and the information on it or connected to it are not a part of this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

In evaluating NVIDIA, the following risk factors should be considered in addition to the other information in this Annual Report on Form 10-K. Purchasing or owning NVIDIA common stock involves investment risks including, but not limited to, the risks described below. Any one of the following risks could harm our business, financial condition, results of operations or reputation, which could cause our stock price to decline, and you may lose all or a part of your investment. Additional risks, trends and uncertainties not presently known to us or that we currently believe are immaterial may also harm our business, financial condition, results of operations or reputation.

Risk Factors Summary

Risks Related to Our Industry and Markets

- Failure to meet the evolving needs of our industry and markets may adversely impact our financial results.
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- Competition in our current and target markets could cause us to lose market share and revenue.

Risks Related to Demand, Supply and Manufacturing

- Failure to estimate customer demand properly has led and could lead to mismatches between supply and demand.
- Dependency on third-party suppliers and their technology reduces our control over product quantity and quality, manufacturing yields, development, enhancement, and product delivery schedules and could harm our business.
- Defects in our products have caused and could cause us to incur significant expenses to remediate and can damage our business.

Risks Related to Our Global Operating Business

- Adverse economic conditions may harm our business.
- International operations are a significant part of our business, and economic, political, business, and other changes in the regions in which we operate may expose us to risks that could harm our business.
- Product, system security, and data breaches and cyber-attacks could disrupt our operations and adversely affect our financial condition, stock price and reputation.
- Business disruptions could harm our operations and financial results.
- Climate change may have a long-term impact on our business.
- We may not be able to realize the potential benefits of business investments or acquisitions, nor successfully integrate acquisition targets.
- A significant amount of our revenue stems from a limited number of customers and could be adversely affected if we lose or are prevented from selling to any of these customers.
- We may be unable to attract, retain and motivate our executives and key employees.
- Modification or interruption of our business processes and information systems may disrupt our business, processes and internal controls.
- The COVID-19 pandemic has affected and could continue to have a material adverse impact on our financial condition and results of operations.
- Our operating results have in the past fluctuated and may in the future fluctuate, and if our operating results are below the expectations of securities analysts or investors, our stock price could decline.

Risks Related to Regulatory, Legal, Our Stock and Other Matters

- We are subject to complex laws, rules and regulations, and political and other actions, which may adversely impact our business.
 - Increased scrutiny from shareholders, regulators, and others regarding our environmental, social and governance responsibilities could result in financial, reputational and operational harm.
 - Issues relating to the responsible use of our technologies, including AI, may result in reputational and financial harm and liability.
 - Adequately protecting our IP rights could be costly, and our ability to compete could be harmed if we are unsuccessful or if we are prohibited from making or selling our products.
 - We are subject to stringent and changing data privacy and security laws, rules, regulations, and other obligations. Privacy or security concerns relating to our products and services could damage our reputation, deter customers, or result in legal or regulatory proceedings and liability.
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- Our operating results may be adversely impacted by additional tax liabilities, higher than expected tax rates and other tax-related factors.
- Our business is exposed to the risks associated with litigation, investigations and regulatory proceedings.
- Our indebtedness could adversely affect our financial position and cash flows from operations and prevent us from implementing our strategy or fulfilling our contractual obligations.
- Delaware law, provisions in our governing documents, and our agreement with Microsoft could delay or prevent a change in control.

Risk Factors

Risks Related to Our Industry and Markets

Failure to meet the evolving needs of our industry and markets may adversely impact our financial results.

Our accelerated computing platforms experience rapid changes in technology, customer requirements, competitive products, and industry standards.

Our success depends on our ability to:

- timely identify industry changes, adapt our strategies, and develop new or enhance existing products and technologies that meet the evolving needs of these markets, including due to unexpected changes in industry standards or disruptive technological innovation that could render our products incompatible with products developed by other companies;
- develop new products and technologies through investments in research and development;
- launch new offerings with new business models including standalone software, cloud solutions, and software-, infrastructure-, or platform-as-a-service solutions;
- expand the ecosystem for our products and technologies;
- meet evolving and prevailing customer and industry safety and compliance standards;
- manage product and software lifecycles to maintain customer and end user satisfaction;
- develop, acquire, and maintain the internal and external infrastructure needed to scale our business, including our acquisitions integrations, customer support, e-commerce, IP licensing capabilities and cloud service capacity; and
- complete technical, financial, compliance, sales and marketing investments for some of the above activities.

We invest in research and development in markets where we have a limited operating history, which may not produce meaningful revenue for several years, if at all. If we fail to develop or monetize new products and technologies, or if they do not become widely adopted, our financial results could be adversely affected. Obtaining design wins may involve a lengthy process and depend on our ability to anticipate and provide features and functionality that customers will demand. They also do not guarantee revenue. Failure to obtain a design win may prevent us from obtaining future design wins in subsequent generations. We cannot ensure that the products and technologies we bring to market will provide value to our customers and partners. If we fail any of these key success criteria, our financial results may be harmed.

We will offer enterprise customers NVIDIA AI cloud services directly and through our network of partners. Examples of these services include NVIDIA DGX Cloud, which is cloud-based infrastructure and software for training AI models, and customizable pretrained AI models. NVIDIA has partnered with leading cloud service providers to host these services in their data centers, and we entered into multi-year cloud service agreements in the second half of fiscal year 2023 to support these offerings and our research and development activities. NVIDIA AI cloud services may not be successful and will take time, resources and investment. We also offer or plan to offer standalone software solutions for AI including NVIDIA AI Enterprise, NVIDIA Omniverse, NVIDIA DRIVE for automotive, and several other software solutions. These new

business models or strategies may not be successful and we may fail to sell any meaningful standalone software or as-a-service solutions. We may incur significant costs and may not achieve any significant revenue from these offerings.

Competition in our current and target markets could cause us to lose market share and revenue.

Our target markets remain competitive, and competition may intensify with expanding and changing product and service offerings, industry standards, customer needs, new entrants and consolidations. Our competitors' products, services and technologies, including those mentioned above in this Annual Report on Form 10-K, may be cheaper or provide better functionality or features than ours, which has resulted and may in the future result in lower than expected selling prices for our products. Some of our competitors operate their own fabrication facilities, have longer operating histories, larger customer bases, more comprehensive IP portfolios and patent protections, new designs and more design wins, and greater financial, sales, marketing and distribution resources than we do. These competitors may be able to acquire market share and/or prevent us from doing so, more effectively identify and capitalize upon opportunities in new markets and end user customer trends, more quickly transition their products, and secure sufficient foundry capacity and packaging materials during a supply-constrained environment, which could harm our business. Some of our customers have in-house expertise and internal development capabilities similar to some of ours and can use or develop their own solutions to replace those we are providing. For example, others may offer cloud-based services that compete with our AI cloud service offerings, and we may not be able to establish market share sufficient to achieve scale necessary to meet our business objectives. If we are unable to successfully compete in this environment, demand for our products, services and technologies could decrease, which would cause our revenue to decline.

Risks Related to Demand, Supply and Manufacturing

Failure to estimate customer demand properly has led and could lead to mismatches between supply and demand.

We use third parties to manufacture and assemble our products, and we have had and may in the future have long manufacturing lead times. We are not provided guaranteed wafer, component and capacity supply, and our supply deliveries and production may be non-linear within a quarter or year. If our estimates of customer demand are ultimately inaccurate, as we have experienced from time to time, there could be a significant mismatch between supply and demand. This mismatch has resulted in both product shortages and excess inventory, has varied across our market platforms, and has significantly harmed our financial results.

We build finished products and maintain inventory in advance of anticipated demand. While we have in the past entered and may in the future enter into long-term supply and capacity commitments, we may not be able to secure sufficient commitments for capacity to address our business needs or our long-term demand expectations may change. Additionally, our ability to sell certain products has been and could be impeded if components from third parties that are necessary for the finished product are not available. In periods of shortages impacting the semiconductor industry and/or limited supply or capacity in our supply chain, the lead times on our orders may be extended. We have previously experienced extended lead times of more than 12 months. We have paid premiums and provided deposits to secure future supply and capacity, which have increased our product costs and may continue to do so. We may not have the ability to reduce our supply commitments at the same rate or at all if our revenue declines.

Demand for our products is based on many factors in addition to the lead times described above that have caused and/or could in the future cause us to either underestimate or overestimate our customers' future demand for our products, or otherwise cause a mismatch between supply and demand for our products and impact the timing and volume of our revenue, including:

- competing technologies and competitor product releases and announcements;
 - changes in business and economic conditions resulting in decreased end demand;
 - sudden or sustained government lockdowns or actions to control case spread of COVID-19 or other global or local health issues;
 - rapidly changing technology or customer requirements;
 - time to market;
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- new product introductions and transitions resulting in less demand for existing products;
- new or unexpected end use cases;
- increase in demand for competitive products, including competitive actions;
- business decisions made by third parties;
- the demand for accelerated or AI-related cloud services, including our own software and AI cloud service offerings;
- the demand for cryptocurrency mining; or
- government actions or changes in governmental policies, such as increased restrictions on gaming usage.

Our supply, which includes inventory on hand, purchase obligations and prepaid supply agreements, has grown significantly due to current supply chain conditions, complexity of our products, and recent reductions in demand. At the end of fiscal year 2023, purchase obligations and prepaid supply agreements represented more than half of our total supply. We may incur inventory provisions if our inventory or supply commitments are misaligned with demand for our products.

Our demand predictions may not be correct, as we have experienced from time to time. Product transitions are complex and frequently negatively impact our revenue as we often ship both new and legacy architecture products simultaneously and we and our channel partners prepare to ship and support new products. Our architecture transitions of Data Center, Professional Visualization, and Gaming products may impair our ability to predict demand and impact our supply mix. Qualification time for new products, customers anticipating product transitions and channel partners reducing channel inventory of legacy architectures ahead of new product introductions can create reductions or volatility in our revenue. We have experienced and may in the future experience reduced demand for current generation architectures when customers anticipate transitions, and we may be unable to sell multiple product architectures at the same time for current and future architecture transitions. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult and prior trends may not continue. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted.

We sell most of our products through channel partners, who sell to distributors, retailers, and/or end customers. As a result, the decisions made by our channel partners, distributors, retailers, and in response to changing market conditions and changes in end user demand for our products have impacted and could in the future continue to impact our ability to properly forecast demand, particularly as they are based on estimates provided by various downstream parties.

If we underestimate our customers' future demand for our products, our foundry partners may not have adequate lead-time or capacity to increase production and we may not be able to obtain sufficient inventory to fill orders on a timely basis. Even if we are able to increase production levels to meet customer demand, we may not be able to do so in a cost-effective or timely manner, or our contract manufacturers may experience supply constraints. If we fail to fulfill our customers' orders on a timely basis, or at all, our customer relationships could be damaged, we could lose revenue and market share and our reputation could be harmed.

If we overestimate our customers' future demand for our products, or if customers cancel or defer orders or choose to purchase from our competitors, we may not be able to reduce our inventory or other contractual purchase commitments. In the past, we have experienced a reduction in average selling prices, including due to channel pricing programs that we have implemented and may continue to implement, as a result of our overestimation of future demand, and we may need to continue these reductions. We have had to increase prices for certain of our products as a result of our suppliers' increase in prices, and we may need to continue to do so for other products in the future. We have also written-down our inventory, incurred cancellation penalties, and recorded impairments. These impacts were amplified by our placement of non-cancellable and non-returnable purchasing terms, well in advance of our historical lead times and could be exacerbated if we need to make changes to the design of future products. The risk of these impacts has increased as our purchase obligations and prepaids have grown and become a greater portion of our total supply while our

revenue has sequentially declined. All of these factors may negatively impact our gross margins and financial results.

We build technology and products for use cases and applications that may be new or may not yet exist. Examples include our Omniverse platform and third-party large language models and generative models. Our demand estimates for these use cases and applications can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate any revenue from these use cases and applications.

Challenges in estimating demand could become more pronounced or volatile in the future on both a global and regional basis. Extended lead times may occur if we experience other supply constraints caused by natural disasters, pandemics or other events, such as the COVID-19 pandemic. In addition, geopolitical tensions, such as those involving Taiwan and China, which comprise a significant portion of our revenue and where we have suppliers, contract manufacturers, and assembly partners who are critical to our supply continuity, could have a material adverse impact on us.

The use of our GPUs for other than that for which they were designed and marketed, including new and unexpected use cases, has impacted and can in the future impact demand for our products, including by leading to inconsistent spikes and drops in demand. For example, a number of years ago, our Gaming GPUs began to be used for digital currency mining, including blockchain-based platforms such as Ethereum. It is difficult for us to estimate with any reasonable degree of precision, the past or current impact of cryptocurrency mining, or forecast the future impact of cryptocurrency mining, on demand for our products. Volatility in the cryptocurrency market, including new compute technologies, price changes in cryptocurrencies, government cryptocurrency policies and regulations, new cryptocurrency standards, and changes in the method of verifying blockchain transactions, has impacted and can in the future impact cryptocurrency mining and demand for our products and can further impact our ability to estimate demand for our products. Changes to cryptocurrency standards and processes including, but not limited to, the recently implemented Ethereum 2.0 merge may decrease the usage of GPUs for Ethereum mining as well as create increased aftermarket sales of our GPUs, which could negatively impact retail prices for our GPUs and reduce demand for our new GPUs. We previously introduced Lite Hash Rate, or LHR, GeForce GPUs with limited Ethereum mining capability and provided CMP products in an effort to address demand from gamers and direct miners to CMP. With the Ethereum 2.0 merge, NVIDIA Ampere and Ada Lovelace architectures no longer include LHR. In addition, our new products or previously sold products may be resold online or on the unauthorized "gray market," which also makes demand forecasting difficult. Gray market products and reseller marketplaces compete with our new products and distribution channels.

Additionally, we depend on developers and other third parties to build accelerated computing applications that leverage our platforms. We also rely on third-party content providers and publishers to make their content available on our platforms such as GeForce NOW. Failure by developers to build applications that leverage our platforms, or failure by third-party content providers or publishers to make their content available on reasonable terms or at all for use by our customers or end users on our platforms, could adversely affect customer demand.

Dependency on third-party suppliers and their technology to manufacture, assemble, test, package or design our products reduces our control over product quantity and quality, manufacturing yields, development, enhancement and product delivery schedules and could harm our business.

We depend on foundries to manufacture our semiconductor wafers using their fabrication equipment and techniques. We do not assemble, test or package our products, but instead contract with independent subcontractors. We also rely on third-party software development tools to assist us in the design, simulation and verification of new products or product enhancements. The design requirements necessary to meet consumer demands for greater functionality from our products may exceed the capabilities of available software development tools. We face several risks which have adversely affected or could adversely affect our ability to meet customer demand and scale our supply chain, negatively impact longer-term demand for our products and services, and adversely affect our business operations, gross margin, revenue and/or financial results, including:

- lack of guaranteed supply of wafer, component and capacity or decommitment and potential higher wafer and component prices, from incorrectly estimating demand and failing to place orders with our suppliers with sufficient quantities or in a timely manner;
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- failure by our foundries or contract manufacturers to procure raw materials or to provide adequate levels of manufacturing or test capacity for our products;
- failure by our foundries to develop, obtain or successfully implement high quality process technologies, including transitions to smaller geometry process technologies such as advanced process node technologies and memory designs needed to manufacture our products;
- limited number and geographic concentration of global suppliers, foundries, contract manufacturers, assembly and test providers, and memory manufacturers;
- loss of a supplier and additional expense and/or production delays as a result of qualifying a new foundry or subcontractor and commencing volume production or testing in the event of a loss of or a decision to add or change a supplier;
- lack of direct control over product quantity, quality and delivery schedules;
- suppliers or their suppliers failing to supply high quality products and/or making changes to their products without our qualification;
- delays in product shipments, shortages, a decrease in product quality and/or higher expenses in the event our subcontractors or foundries prioritize our competitors' or other customers' orders over ours;
- requirements to place orders that are not cancellable upon changes in demand or requirements to prepay for supply in advance;
- low manufacturing yields resulting from a failure in our product design or a foundry's proprietary process technology; and
- disruptions in manufacturing, assembly and other processes due to closures related to heat waves or other natural disasters and electricity conservation efforts.

Defects in our products have caused and could cause us to incur significant expenses to remediate, which can damage our reputation and cause us to lose market share.

Our hardware and software product offerings are complex and they have in the past and may in the future contain defects or security vulnerabilities, or experience failures or unsatisfactory performance due to any number of issues in design, fabrication, packaging, materials and/or use within a system. These risks may increase as our products are introduced into new devices, markets, technologies and applications or as new versions are released. These risks further increase when we rely on partners to supply and manufacture components that are used in our products, as these arrangements reduce our direct control over production. Although arrangements with component providers may contain provisions for product defect expense reimbursement, we generally remain responsible to the customer for warranty product defects that may occur from time to time. Some failures in our products or services have been in the past and may in the future be only discovered after a product or service has been shipped or used. Undiscovered vulnerabilities in our products or services could result in loss of data or intangible property, or expose our end customers to unscrupulous third parties who develop and deploy malicious software programs that could attack our products or services. Defects or failure of our products to perform to specifications could lead to substantial damage to the products or the product in which our device has been integrated by OEMs, ODMs, AIBs and automotive manufacturers and tier 1 automotive suppliers, and to the user of such end product. Any such defect may cause us to incur significant warranty, support and repair or replacement costs as part of a product recall or otherwise, write-off the value of related inventory, and divert the attention of our engineering and management personnel from our product development efforts to find and correct the issue. Our efforts to remedy these issues may not be timely or satisfactory to our customers. An error or defect in new products, releases, or related software drivers after commencement of commercial shipments could result in failure to achieve market acceptance, loss of design wins, temporary or permanent withdrawal from a product or market, and harm to our relationships with existing and prospective customers and partners and consumers' perceptions of our brand, which would in turn negatively impact our business operations, gross margin, revenue and/or financial results. We may be required to reimburse our customers, partners or consumers, including for costs to repair or replace products in the field or in connection with indemnification obligations, or pay fines imposed by regulatory agencies.

For example, a defect was identified in a third-party component embedded in certain Data Center products. This defect has had, and other defects may in the future have, an adverse effect on our cost and supply of components and finished goods. These costs could be significant in future periods. We recorded a net warranty liability during fiscal year 2023 primarily in connection with this defect. While we believe we have accurately recorded for warranty obligations, we may need to record additional amounts in the future if our estimate proves to be incorrect. In general, if a product liability claim regarding any of our products is brought against us, even if the alleged damage is due to the actions or inactions of a third party, such as within our supply chain, the cost of defending the claim could be significant and would divert the efforts of our technical and management personnel and harm our business. Further, our business liability insurance may be inadequate or future coverage may be unavailable on acceptable terms, which could adversely impact our financial results.

Risks Related to Our Global Operating Business

Adverse economic conditions may harm our business.

Economic and industry uncertainty or changes, including recession or slowing growth, inflation, changes or uncertainty in fiscal, monetary, or trade policy, disruptions to capital markets, currency fluctuations, higher interest rates, tighter credit, lower capital expenditures by businesses, including on IT infrastructure, increases in unemployment, labor shortages, and lower consumer confidence and spending, have in the past and/or could in the future have adverse, wide-ranging effects on our business and financial results, including:

- increased costs for wafers, components, logistics, and other supply chain expenses, which have negatively impacted our gross margin and may continue to do so;
- increased supply, employee, facilities and infrastructure costs and volatility in the financial markets, which have reduced and may in the future reduce our margins;
- decrease in demand for our products, services and technologies and those of our customers, partners or licensees;
- the inability of our suppliers to deliver on their supply commitments to us and our customers' or our licensees' inability to supply products to customers and/or end users;
- limits on our ability to forecast operating results and make business decisions;
- the insolvency of key suppliers, distributors, customers or licensing parties; reduced profitability may also cause some customers to scale back operations, exit businesses, or file for bankruptcy protection and potentially cease operations; lead to mergers, consolidations or strategic alliances among other companies, which could adversely affect our ability to compete effectively; and
- increased credit and collectability risks, higher borrowing costs or reduced availability of capital markets, reduced liquidity, adverse impacts on our suppliers, failures of counterparties including financial institutions and insurers, asset impairments, and declines in the value of our financial instruments.

International operations are a significant part of our business, which exposes us to us to risks that could harm our business.

We conduct our business and have offices worldwide. Our semiconductor wafers are manufactured, assembled, tested and packaged by third parties located outside of the United States, and we generated 69% of our revenue during fiscal year 2023 from sales outside of the United States. The global nature of our business subjects us to a number of risks and uncertainties, which have had in the past and could in the future have a material adverse effect on our business, financial condition and results of operations, including domestic and international economic and political conditions between countries in which we and our suppliers and manufacturers do business, government lockdowns to control case spread of COVID-19 or other global or local health issues, differing legal standards with respect to protection of IP and employment practices, domestic and international business and cultural practices that differ, disruptions to capital markets, counter-inflation policies, and/or currency fluctuations, and natural disasters, acts of war or other military actions, terrorism, public health issues, and other catastrophic events.

Product, system security, and data protection breaches, as well as cyber-attacks, could disrupt our operations, reduce our expected revenue and increase our expenses, which could adversely affect our stock price and damage our reputation.

Security breaches, computer malware, social-engineering attacks, denial-of-service attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, and other cyber-attacks are increasingly sophisticated, making it more difficult to successfully detect, defend against them or implement adequate preventative measures.

Cyber-attacks, including ransomware attacks by organized criminal threat actors, nation-states, and nation-state-supported actors, may become more prevalent and severe. Our ability to recover from ransomware attacks may be limited if our backups have been affected by the attack, or if restoring from backups is delayed or not feasible.

Threat actors, sophisticated nation-states, and nation-state-supported actors now engage and are expected to continue to engage in cyber-attacks. Due to increasing geopolitical conflicts and during times of war or other major conflicts, we and the third parties upon which we rely may be vulnerable to a heightened risk of cyber-attacks that could materially disrupt our ability to provide services and products. Furthermore, we rely on products and services provided by third-party suppliers to operate certain critical business systems, including without limitation, cloud-based infrastructure, encryption and authentication technology, employee email, and other functions, which exposes us to supply-chain attacks or other business disruptions. We cannot guarantee that third parties and infrastructure in our supply chain or our partners' supply chains have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our information technology systems, including our products and services, or the third-party information technology systems that support our services. Our ability to monitor these third parties' information security practices is limited, and these may not have adequate information security measures in place. In addition, if one of our third-party suppliers suffers a security breach, our response may be limited or more difficult because we may not have direct access to their systems, logs and other information related to the security breach. Additionally, we are incorporated into the supply chain of a large number of entities worldwide and, as a result, if our products or services are compromised, a significant number of our customers and their data could be affected, which could result in potential liability and harm our business.

To defend against cyber-attacks, we must continuously engineer more secure products and enhance security and reliability features, which is expected to result in increased expenses. We must also continue to develop our security measures, ensure our suppliers have appropriate security measures in place, and continue to meet the evolving security requirements of our customers, applicable industry standards, and government regulations. While we take steps to detect and remediate certain vulnerabilities that we have identified, we may not always be able to detect all vulnerabilities in our security controls, systems or software, including third-party software we have installed, as such threats and techniques change frequently and may not be detected until after a security incident has occurred. Further, we may experience delays in developing and deploying remedial measures designed to address identified vulnerabilities. These vulnerabilities could result in reputational and financial harm.

We hold confidential and proprietary information, including information from partners and customers. Breaches of our security measures, along with reported or perceived vulnerabilities or unapproved dissemination of proprietary information or sensitive or confidential data about us or third parties could expose us and the parties affected to a risk of loss or misuse of this information, potentially resulting in litigation and subsequent liability, regulatory inquiries or actions, damage to our brand and reputation or other harm, including financial, to our business. For example, we hold propriety game source code from third-party partners in our GFN service. Breaches of our GFN security measures, which have happened in the past, could expose our partners to a risk of loss or misuse of this source code, damage both us and our partners, and expose NVIDIA to potential litigation and liability. If we or a third party we rely on experience a security incident, which has occurred in the past, or are perceived to have experienced a security incident, we may experience adverse consequences, including government enforcement actions, additional reporting requirements and/or oversight, restrictions on processing data, litigation, indemnification obligations, reputational harm, diversion of funds, financial loss, loss of data, material disruptions in our systems and operations, supply chain, and ability to produce, sell and distribute our goods and services, and other similar harms. Inability to fulfill orders, delayed sales, lower margins or lost customers as a result of these disruptions could adversely affect our financial results, stock price and reputation.

Business disruptions could harm our operations, lead to a decline in revenue and increase our costs .

Our worldwide operations could be disrupted by natural disasters and extreme weather conditions, power or water shortages, telecommunications failures, cloud service provider outages, terrorist attacks, or acts of violence, political and/or civil unrest, acts of war or other military actions, epidemics or pandemics and other natural or man-made disasters and catastrophic events. Our corporate headquarters, a large portion of our current data center capacity, and a portion of our research and development activities are located in California, and other critical business operations, finished goods inventory, and some of our suppliers are located in Asia, making our operations vulnerable to natural disasters such as earthquakes, wildfires, or other business disruptions occurring in these geographical areas. Catastrophic events can also have an impact on third-party vendors who provide us critical infrastructure services for IT and research and development systems and personnel. Geopolitical and domestic political developments and other events beyond our control, can increase economic volatility globally. Political instability, changes in government or adverse political developments in or around any of the major countries in which we do business would also likely harm our business, financial condition and results of operations. Worldwide geopolitical tensions and conflicts, including but not limited to China, Hong Kong, Israel, Korea and Taiwan where the manufacture of our product components and final assembly of our products are concentrated may result in changing regulatory requirements, and other disruptions that could impact our operations and operating strategies, product demand, access to global markets, hiring, and profitability. For example, other countries have restricted and may continue in the future to restrict business with the State of Israel, where we have engineering, sales support operations and manufacturing, and companies with Israeli operations, including by economic boycotts. Our operations could be harmed and our costs could increase if manufacturing, logistics or other operations are disrupted for any reason, including natural disasters, high heat events or water shortages, information technology system failures, military actions or economic, business, labor, environmental, public health, or political issues. The ultimate impact on us, our third-party foundries and other suppliers of being located and consolidated in certain geographical areas is unknown. In the event a disaster, war or catastrophic event affects us, the third-party systems on which we rely, or our customers, our business could be harmed as a result of declines in revenue, increases in expenses, and substantial expenditures and time spent to fully resume operations. All of these risks and conditions could materially adversely affect our future sales and operating results.

Climate change may have a long-term impact on our business.

Climate change may have an increasingly adverse impact on our business and those of our customers, partners and vendors. Water and energy availability and reliability in the communities where we conduct business is critical, and certain of our facilities may be vulnerable to the impacts of extreme weather events. Extreme heat and wind coupled with dry conditions in Northern California may lead to power safety shut offs due to wildfire risk, which can have adverse implications for our Santa Clara, California headquarter offices and data centers, including impairing the ability of our employees to work effectively. Climate change, its impact on our supply chain and critical infrastructure worldwide, and its potential to increase political instability in regions where we, our customers, partners and our vendors do business, may disrupt our business and cause us to experience higher attrition, losses and costs to maintain or resume operations. Although we maintain insurance coverage for a variety of property, casualty, and other risks, the types and amounts of insurance we obtain vary depending on availability and cost. Some of our policies have large deductibles and broad exclusions, and our insurance providers may be unable or unwilling to pay a claim. Losses not covered by insurance may be large, which could harm our results of operations and financial condition.

Our business and those of our suppliers and customers, may also be subject to climate-related laws, regulations and lawsuits. Regulations such as carbon taxes, fuel or energy taxes, and pollution limits could result in greater direct costs, including costs associated with changes to manufacturing processes or the procurement of raw materials used in manufacturing processes, increased capital expenditures to improve facilities and equipment, and higher compliance and energy costs to reduce emissions, as well as greater indirect costs resulting from our customers, suppliers or both incurring additional compliance costs that are passed on to us. These costs and restrictions could harm our business and results of operations by increasing our expenses or requiring us to alter our operations and product design activities. Stakeholder groups may find us insufficiently responsive to the implications of climate change, and therefore we may face legal action or reputational harm. We may not achieve our stated goal to source 100% of our global electricity use from renewable energy by the end of fiscal year 2025, which could harm our reputation, or we may incur additional,

unexpected costs to achieve such a goal. We may also experience contractual disputes due to supply chain delays arising from climate change-related disruptions, which could result in increased litigation and costs.

We also face risks related to business trends that may be influenced by climate change concerns. We may face decreased demand for computationally powerful but energy intensive products, such as our GPUs, despite their energy efficient design and operation, and/or increased consumer or customer expectations around the energy efficiency of our products, could negatively impact our business.

We may not be able to realize the potential benefits of business investments or acquisitions, and we may not be able to successfully integrate acquisition targets, which could hurt our ability to grow our business, develop new products or sell our products.

We have acquired and invested and may continue to do so in businesses that offer products, services and technologies that we believe will help expand or enhance our existing strategic objectives. Acquisitions or investments involve significant challenges and risks and could impair our ability to grow our business, develop new products or sell our products and ultimately could have a negative impact on our financial results. If we pursue a particular transaction, we may limit our ability to enter into other transactions that could help us achieve our other strategic objectives. If we are unable to timely complete acquisitions, including due to delays and challenges in obtaining regulatory approvals, we may be unable to pursue other transactions, we may not be able to retain critical talent from the target company, technology may evolve and make the acquisition less attractive, and other changes can take place which could reduce the anticipated benefits of the transaction and negatively impact our business. For example, in February 2022, NVIDIA and SoftBank announced the termination of the Share Purchase Agreement whereby NVIDIA would have acquired Arm from SoftBank due to significant regulatory challenges preventing the completion of the transaction. We recorded in operating expenses a \$1.35 billion charge in fiscal year 2023 reflecting the write-off of the prepayment provided at signing. Regulators could also impose conditions that reduce the ultimate value of our acquisitions. In addition, to the extent that our perceived ability to consummate acquisitions has been harmed, future acquisitions may be more difficult, complex or expensive. Further, if we hold investments in publicly traded companies, they could create volatility in our results and may generate losses up to the value of the investment.

Additional risks related to acquisitions or strategic investments include, but are not limited to:

- difficulty in integrating the technology, systems, products, policies, processes, or operations and integrating and retaining the employees, including key personnel, of the acquired business;
 - diversion of capital and other resources, including management's attention;
 - assumption of liabilities and incurring amortization expenses, impairment charges to goodwill or write-downs of acquired assets;
 - integrating accounting, forecasting and controls, procedures and reporting cycles;
 - coordinating and integrating operations, particularly in countries in which we do not currently operate;
 - difficulty in realizing a satisfactory return and uncertainties to realize the benefits of an acquisition or strategic investment, if at all;
 - difficulty or inability in obtaining governmental, regulatory approval or restrictions or other consents and approvals or financing;
 - stock price impact, fines, fees or reputation harm if we are unable to obtain regulatory approval for an acquisition or are otherwise unable to close an acquisition;
 - legal proceedings initiated as a result of an acquisition or investment;
 - potential issuances of debt to finance our acquisitions, resulting in increased debt, increased interest expense, and compliance with debt covenants or other restrictions;
 - the potential for our acquisitions to result in dilutive issuances of our equity securities;
 - the potential variability of the amount and form of any performance-based consideration;
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- negative changes in general economic conditions in the regions or the industries in which we or our target operate;
- exposure to additional cybersecurity risks and vulnerabilities;
- potential failure of our due diligence processes to identify significant issues with the assets or company in which we are investing or are acquiring; and
- impairment of relationships with, or loss of our or our target's employees, vendors and customers.

For example, when integrating acquisition target systems into our own, we have experienced and may continue to experience challenges including lengthy and costly systems integration, delays in purchasing and shipping products, difficulties with system integration via electronic data interchange and other processes with our key suppliers and customers, and training and change management needs of integration personnel. These challenges have impacted our results of operations and may continue to do so in the future.

We receive a significant amount of our revenue from a limited number of customers and our revenue could be adversely affected if we lose or are prevented from selling to any of these customers.

We receive a significant amount of our revenue from a limited number of customers within our distribution and partner network. With several of these distributors and partners, we are selling multiple target market platforms through their channels. Our operating results depend on sales within our partner network, as well as the ability of these partners to sell products that incorporate our processors. In the future, these partners may decide to purchase fewer products, not to incorporate our products into their ecosystem, or to alter their purchasing patterns in some other way. Because most of our sales are made on a purchase order basis, our customers can cancel, change or delay product purchase commitments with little or no notice to us and without penalty. Our partners or customers may develop their own solutions; our customers may purchase products from our competitors; and our partners may discontinue sales or lose market share in the markets for which they purchase our products, all of which may alter partners' or customers' purchasing patterns. The loss of any of our large customers, a significant reduction in purchases by them, our inability to sell to a customer due to U.S. or other countries' trade restrictions, or any difficulties in collecting accounts receivable would likely harm our financial condition and results of operations.

If we are unable to attract, retain and motivate our executives and key employees, our business may be harmed.

To be competitive and execute our business strategy successfully, we must attract, retain and motivate our executives and key employees and recruit and develop diverse talent. Labor is subject to external factors that are beyond our control, including our industry's highly competitive market for skilled workers and leaders, cost inflation, the COVID-19 pandemic and workforce participation rates. Changes in immigration and work permit regulations or in their administration or interpretation could impair our ability to attract and retain qualified employees. Competition for personnel results in increased costs in the form of cash and stock-based compensation, and in times of stock price volatility, as we have experienced in the past and may experience in the future, the retentive value of our stock-based compensation may decrease. Additionally, we are highly dependent on the services of our longstanding executive team. Failure to ensure effective succession planning, transfer of knowledge and smooth transitions involving executives and key employees could hinder our strategic planning and execution and long-term success.

Our business is dependent upon the proper functioning of our business processes and information systems and modification or interruption of such systems may disrupt our business, processes and internal controls.

We rely upon internal processes and information systems to support key business functions, including our assessment of internal controls over financial reporting as required by Section 404 of the Sarbanes-Oxley Act. The efficient operation and scalability of these processes and systems is critical to support our growth. In fiscal year 2023, we continued the implementation of accounting and consolidation functionality related to a new enterprise resource planning, or ERP, system. Any ERP system problems upon implementation, such as quality issues or programming errors, could impact our continued ability to successfully operate our business or to timely and accurately report our financial results. These changes may be costly and disruptive to our operations and could impose substantial demands on management time. Failure to implement new or updated controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations.

Identification of material weaknesses in our internal controls, even if quickly remediated once disclosed, may cause investors to lose confidence in our financial statements and our stock price may decline. Remediation of any material weakness could require us to incur significant expenses, and if we fail to remediate any material weakness, our financial statements may be inaccurate, we may be required to restate our financial statements, our ability to report our financial results on a timely and accurate basis may be adversely affected, our access to the capital markets may be restricted, our stock price may decline, and we may be subject to sanctions or investigation by regulatory authorities.

The COVID-19 pandemic has affected and could continue to have a material adverse impact on our financial condition and results of operations.

The COVID-19 pandemic has impacted and may continue to impact our workforce and operations and those of our customers, partners, vendors and suppliers. COVID-19-related disruptions have created and may continue to create supply chain and logistics constraints, and COVID-19 containment around the world has put restrictions on, among other areas, manufacturing facilities, commerce, and support operations. Restrictions may be imposed or reinstated as the pandemic resurfaces, such as lockdown measures due to COVID-19 containment efforts in China. End customer sales for our products in China have been negatively impacted by lockdowns and this impact may continue if lockdowns return. COVID-19 has also resulted in, and may continue to result in, disruption of and volatility in global financial markets, which could impact overall technology spending or negatively affect our stock price and liquidity. All of these factors have had or could in the future have a material negative impact on our business.

We modified our business and workforce practices in response to COVID-19, including with respect to flexible work and social distancing measures, and we may take further actions as required by government regulations or in the best interests of our employees, customers, partners and suppliers. These and other measures have caused and may in the future cause us to incur incremental expenses and costs.

The extent of the impact of the COVID-19 pandemic on our operational and financial performance and our ability to timely execute our business strategies may continue to be difficult to measure and predict. The impact of COVID-19 can also exacerbate other risks discussed in these risk factors.

Our operating results have in the past fluctuated and may in the future fluctuate, and if our operating results are below the expectations of securities analysts or investors, our stock price could decline.

Our operating results have in the past fluctuated and may continue to fluctuate due to numerous factors described in these risk factors. Therefore, investors should not rely on past comparisons of our results of operations as an indication of our future performance. Additional factors that could affect our results of operations include, but are not limited to:

- our ability to adjust spending to offset revenue shortfalls due to the multi-year development cycle for some of our products and services;
- our ability to comply with our customers' contractual obligations;
- our extended payment term arrangements with certain customers, the inability of some customers to make required payments, our ability to obtain credit insurance for these customers and their extended payment terms, and customer bad debt write-offs;
- our vendors' payment requirements;
- unanticipated costs associated with environmental liabilities; and
- changes in financial accounting standards or interpretations of existing standards.

Any one or more of the factors discussed above could prevent us from achieving our anticipated future financial results. For example, we have granted and may continue to grant extended payment terms to some customers, particularly during macroeconomic downturns, which could impact our ability to collect payment. Our vendors have requested and may continue to ask for shorter payment terms, which may impact our cash flow generation. These arrangements reduce the cash we have available for general business operations. Failure to meet our expectations or the expectations of our investors or security analysts is likely to cause our stock price to decline, as it has in the past, or experience substantial price volatility.

Risks Related to Regulatory, Legal, Our Stock and Other Matters

Our operations could be affected by the complex laws, rules and regulations to which our business is subject, and political and other actions may adversely impact our business.

We are subject to laws and regulations domestically and worldwide, affecting our operations in areas including, but not limited to, IP ownership and infringement; taxes; import and export requirements and tariffs; anti-corruption, including the Foreign Corrupt Practices Act; business acquisitions; foreign exchange controls and cash repatriation restrictions; data privacy requirements; competition and antitrust; advertising; employment; product regulations; cybersecurity; environmental, health, and safety requirements; the responsible use of AI; climate change; cryptocurrency; and consumer laws. Compliance with such requirements can be onerous and expensive, could impact our competitive position, and may negatively impact our business operations and ability to manufacture and ship our products. There can be no assurance that our employees, contractors, suppliers, customers or agents will not violate applicable laws or the policies, controls, and procedures that we have designed to help ensure compliance with such laws, and violations could result in fines, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business, and damage to our reputation. Changes to the laws, rules and regulations to which we are subject, or changes to their interpretation and enforcement could lead to materially greater compliance and other costs and/or further restrictions on our ability to manufacture and supply our products and operate our business. For example, we may face increased compliance costs as a result of changes or increases in anti-competition legislation, regulation, administrative rule making, increased focus from regulators on cybersecurity vulnerabilities and risks, and enforcement activity resulting from growing public concern over concentration of economic power in corporations. Revisions to laws or regulations or their interpretation and enforcement could also result in increased taxation, trade sanctions, the imposition of or increase to import duties or tariffs, restrictions and controls on imports or exports, or other retaliatory actions, which could have an adverse effect on our business plans or impact the timing of our shipments. Additionally, changes in the public perception of governments in the regions where we operate or plan to operate could negatively impact our business and results of operations.

Government actions, including trade protection and national security policies of U.S. and foreign government bodies, such as tariffs, import or export regulations, including deemed export restrictions, trade and economic sanctions, decrees, quotas or other trade barriers and restrictions could affect our ability to ship products, provide services to our customers and employees, do business without an export license with entities on the U.S. Department of Commerce's U.S. Entity List or other U.S. government restricted parties lists (which is expected to change from time to time), and generally fulfill our contractual obligations and have a material adverse effect on our business. If we were ever found to have violated export control laws or sanctions of the U.S. or similar applicable non-U.S. laws, even if the violation occurred without our knowledge, we may be subject to various penalties available under the laws, any of which could have a material and adverse impact on our business, operating results and financial condition.

For example, in response to the war in Ukraine, the United States and other jurisdictions imposed economic sanctions and export control measures which blocked the passage of our products, services and support into Russia, Belarus, and certain regions of Ukraine. In fiscal year 2023, we stopped direct sales to Russia and closed business operations in Russia. Concurrently, the war in Ukraine has impacted end customer sales in EMEA and may continue to do so in the future.

The increasing focus on the strategic importance of AI technologies has already resulted in regulatory restrictions that target products and services capable of enabling or facilitating AI, and may in the future result in additional restrictions impacting some or all of our product and service offerings. Such restrictions could include additional unilateral or multilateral export controls on certain products or technology, including but not limited to AI technologies. As geopolitical tensions have increased, semiconductors associated with AI, including GPUs and associated products, are increasingly the focus of export control restrictions proposed by stakeholders in the U.S. and its allies, and it is likely that additional unilateral or multilateral controls will be adopted. Such controls may be very broad in scope and application, prohibit us from exporting our products to any or all customers in one or more markets, including but not limited to China, and could negatively impact our manufacturing, testing, and warehousing locations and options, or could impose other conditions that limit our ability to serve demand abroad and could negatively and materially impact our business, revenue, and financial results. Export controls targeting GPUs and semiconductors associated with AI, which are increasingly likely, would restrict our ability to export our technology, products, or services even though competitors may not be subject to similar restrictions, creating a competitive disadvantage for us and

negatively impacting our business and financial results. Increasing use of economic sanctions may also impact demand for our products or services, negatively impacting our business and financial results. Additional unilateral or multilateral controls are also likely to include deemed export control limitations that negatively impact the ability of our research and development teams to execute our roadmap or other objectives in a timely manner. Additional export restrictions may not only impact our ability to serve overseas markets, but also provoke responses from foreign governments, including China, that negatively impact our supply chain or our ability to provide our products and services to customers in all markets worldwide, which could also substantially reduce our revenue.

During the third quarter of fiscal year 2023, the U.S. government, or USG, announced new export restrictions and export licensing requirements targeting China's semiconductor and supercomputing industries. These restrictions impact exports of certain chips, as well as software, hardware, equipment, and technology used to develop, produce, and manufacture certain chips, to China (including Hong Kong and Macau) and Russia, and specifically impact our A100 and H100 integrated circuits, DGX or any other systems or boards which incorporate A100 or H100 integrated circuits and our A100X. The new license requirements also apply to any future NVIDIA integrated circuit achieving certain peak performance and chip-to-chip I/O performance thresholds, as well as any system or board that includes those circuits. There are also now licensing requirements to export a wide array of products, including networking products, destined for certain end users and for certain end uses in China.

We are required to transition certain operations out of China (including Hong Kong), which could be costly and time consuming, and adversely affect our research and development and supply and distribution operations, as well as our revenue, during any such transition period.

We have engaged with customers in China to provide alternative products not subject to the new license requirements, such as our new A800 offering. To the extent that a customer requires products covered by the new license requirements, we may seek a license for the customer but have no assurance that the USG will grant any exemptions or licenses for any customer, or that the USG will act on them in a timely manner. The new requirements may have a disproportionate impact on NVIDIA and may disadvantage NVIDIA against certain of our competitors who sell products that are not subject to the new restrictions or may be able to acquire licenses for their products.

Management of these new license and other requirements is complicated and time consuming. Our results and competitive position may be harmed if customers in China do not want to purchase our alternative product offerings, if customers purchase product from competitors, if customers develop their own internal solution, if we are unable to provide contractual warranty or other extended service obligations, if the USG does not grant licenses in a timely manner or denies licenses to significant customers, or if we incur significant transition costs. Additionally, if we are unable to sell our alternative product offerings in China, we may have excess inventory, harming our results. Even if the USG grants any requested licenses, the licenses may be temporary or impose burdensome conditions that we cannot or choose not to fulfill. The new requirements may benefit certain of our competitors, as the licensing process will make our pre-sale and post-sale technical support efforts more cumbersome and less certain, and encourage customers in China to pursue alternatives to our products, including semiconductor suppliers based in China, Europe, and Israel.

Additionally, restrictions imposed by the Chinese government on the duration of gaming activities and access to games may adversely affect our Gaming revenue, and increased oversight of digital platform companies may adversely affect our Data Center revenue.

Increased scrutiny from shareholders, regulators and others regarding our environmental, social and governance responsibilities could result in additional costs or risks and adversely impact our reputation and willingness of customers and suppliers to do business with us.

Shareholder advocacy groups, certain investment funds, other market participants, shareholders and customers have placed increased importance on the implications of the social and environmental cost of their investments and these parties, as well as government regulators, have focused increasingly on corporate ESG and sustainability practices and disclosures, including those associated with climate change and human rights. Stakeholders may not be satisfied with our ESG practices or the speed of their adoption. Additionally, our ESG practices, oversight of ESG practices, or disclosure controls may not meet evolving shareholder, regulator, or other industry stakeholder expectations, or we may fail to meet sustainability disclosure or ESG reporting standards. We could also incur additional costs and require additional resources to monitor, report, and comply with various ESG practices, choose not to conduct business with potential

customers, or discontinue or not expand business with existing customers due to our policies. These factors may negatively harm our brand, reputation and business activities or expose us to liability.

Issues relating to the responsible use of our technologies, including AI in our offerings, may result in reputational and financial harm and liability.

Concerns relating to the responsible use of new and evolving technologies, such as AI, in our products and services may result in reputational and financial harm and liability, and may cause us to incur costs to resolve such issues. We are increasingly building AI capabilities into many of our products and services. AI poses emerging ethical issues and presents risks and challenges that could affect its adoption, and therefore our business. If we enable or offer solutions that draw controversy due to their perceived or actual impact on society, such as AI solutions that have unintended consequences or are controversial because of their impact on human rights, privacy, employment, or other social, economic, or political issues, or if we are unable to develop effective internal policies and frameworks relating to the responsible development and use of AI models and systems offered through our sales channels, we may experience brand or reputational harm, competitive harm or legal liability. Compliance with government regulation in the area of AI ethics may also increase the cost of related research and development, and changes in AI-related regulation could disproportionately impact and disadvantage us and require us to change our business practices, which may negatively impact our financial results. Our failure to address concerns relating to the responsible use of AI by us or others could undermine public confidence in AI and slow adoption of AI in our products and services or cause reputational harm.

Actions to adequately protect our IP rights could result in substantial costs to us and our ability to compete could be harmed if we are unsuccessful or if we are prohibited from making or selling our products.

From time to time, we are involved in lawsuits or other legal proceedings alleging patent infringement or other IP rights violations by us, our employees or parties that we have agreed to indemnify. An unfavorable ruling could include significant damages, invalidation of one or more patents, indemnification of third parties, payment of lost profits, or injunctive relief. Claims that our products or processes infringe the IP rights of others, regardless of their merit, could cause us to incur significant costs to respond to, defend, and resolve such claims, and they may also divert the efforts and attention of management and technical personnel.

We may commence legal proceedings to protect our IP rights, which may increase our operating expenses. We could be subject to countersuits as a result. If infringement claims are made against us or our products are found to infringe a third party's IP, we or one of our indemnitees may have to seek a license to the third party's IP rights. If we or one of our indemnitees is unable to obtain such a license, on acceptable terms or at all, we could be subject to substantial liabilities or have to suspend or discontinue the manufacture and sale of one or more of our products. We may also have to make royalty or other payments, or cross license our technology. If these arrangements are not concluded on commercially reasonable terms, our business could be negatively impacted. Furthermore, the indemnification of a customer or other indemnitee may increase our operating expenses and negatively impact our operating results.

We rely on patents, trademarks, trade secrets, employee and third-party nondisclosure agreements, licensing arrangements, and the laws of the countries in which we operate to protect our IP. Foreign laws may not protect our products or IP rights to the same extent as United States law. This makes the possibility of piracy of our technology and products more likely. The theft or unauthorized use or publication of our trade secrets and other confidential information could harm our competitive position and reduce acceptance of our products; as a result, the value of our investment in research and development, product development, and marketing could be reduced. We also may face risks to our IP if our employees are hired by competitors. We continuously assess whether and where to seek formal protection for existing and new innovations and technologies but cannot be certain whether our applications for such protections will be approved, and, if approved, whether they will be enforceable.

We are subject to stringent and changing data privacy and security laws, rules, regulations, and other obligations. Privacy or security concerns relating to our products and services could damage our reputation, deter current and potential customers, or result in legal or regulatory proceedings and liability.

We may process sensitive, confidential or personal data or information that is subject to privacy and security laws, regulations, industry standards, external and internal policies, contracts and other obligations that govern the processing of such data by us and on our behalf. Concerns about our practices or the ultimate use

of our products and services with regard to the collection, use, retention, security or disclosure of personal information or other privacy-related matters, including for use in AI, even if unfounded, could damage our reputation and adversely affect our operating results. The theft, loss, or misuse of personal data in our possession or by one of our partners could result in damage to our reputation, regulatory proceedings, disruption of our business activities or increased security costs and costs related to defending legal claims.

In the United States, federal, state and local authorities have enacted numerous data privacy and security laws, including for data breach notification, personal data privacy, and consumer protection. The California Consumer Privacy Act of 2018, or CCPA, gives California residents the right to access, delete and opt-out of certain sharing of their personal information, and to receive detailed information about how it is used and shared. The CCPA allows for statutory fines of up to \$7,500 per violation and the law created a private right of action for certain data breaches. The California Privacy Rights Act of 2020, or CPRA, became operative in 2023, and restricts the use of certain categories of sensitive personal information; further restricts the use of cross-contextual advertising techniques; restricts the retention of personal information; expands the types of data breaches subject to the private right of action; and establishes the California Privacy Protection Agency which can impose administrative fines for noncompliance. Virginia, Colorado, Utah and Connecticut have each passed their own privacy legislation which differ from the CPRA and each become effective in 2023. Similar laws are being considered in several other states, as well as at the federal and local levels. Additionally, several states and localities have enacted measures related to the use of artificial intelligence and machine learning in products and services. If we become subject to additional data privacy laws, the risk of enforcement action against us could increase.

Worldwide regulatory authorities are also considering and have approved various legislative proposals concerning data protection. The European Union adopted the General Data Protection Regulation, or GDPR, and the United Kingdom similarly adopted the U.K. GDPR, governing the strict handling of personal data of persons within the European Economic Area, or EEA, and the United Kingdom, respectively, including its use and protection and the ability of persons whose data is stored to access, correct, and delete such data about themselves. If we are found not to comply, we could be subject to penalties of up to €20 million or 4% of worldwide revenue, whichever is greater, and classes of individuals or consumer protection organizations may initiate litigation related to our processing of their personal data. Furthermore, there exists a proposed European regulation related to AI that, if adopted, could impose onerous obligations that may disproportionately impact and disadvantage us and require us to change our business practices.

In the ordinary course of business, we may transfer personal data from Europe, China, and other jurisdictions to the United States or other countries. Certain jurisdictions have enacted data localization laws and cross-border personal data transfer laws. For example, the GDPR generally restricts the transfer of personal data to countries outside of the EEA. The European Commission released a set of "Standard Contractual Clauses" designed for entities to validly transfer personal data out of the EEA to jurisdictions that the European Commission has not found to provide an adequate level of protection, including the United States. While the European Union and United States governments have recently announced an agreement in principle on a new bilateral cross-border transfer mechanism, it is uncertain whether this agreement will be overturned in court like the previous two European Union-United States bilateral cross-border transfer agreements. These mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. Other jurisdictions have enacted or are considering similar cross-border personal data transfer laws and local personal data residency laws, any of which would increase the cost and complexity of doing business and could result in fines from regulators. For example, China law imposes various requirements relating to data processing and data localization. Data broadly defined as important under China law, including personal data, may not be transferable outside of China without prior assessment and approval by the Cyberspace Administration of China, or CAC. Compliance with these requirements, including CAC assessments and any deemed failures of such assessments, could cause us to incur liability, prevent us from using data collected in China, or impact our ability to transfer data outside of China. The inability to import personal data to the United States could significantly and negatively impact our business operations, limit our ability to collaborate with parties that are subject to European, China, and other data privacy and security laws, or require us to increase our personal data processing capabilities in Europe and/or elsewhere at significant expense. Some European regulators have prevented companies from transferring personal data out of Europe for allegedly violating the GDPR's cross-border data transfer limitations, which could negatively impact our business.

We may also be bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful or may be claimed to be non-compliant. For example,

certain privacy laws, such as the GDPR and the CCPA, require our customers to impose specific contractual restrictions on their service providers. We sometimes host personal data in collaboration with our customers, and if a breach exposed or altered that personal data, it could harm those customer relationships and subject us to litigation, regulatory action, or fines. We may publish privacy policies, marketing materials and other statements, such as compliance with certain certifications or self-regulatory principles, regarding data privacy and security. If these policies, materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Data protection laws around the world are quickly changing and may be interpreted and applied in an increasingly stringent fashion and in a manner that is inconsistent with our data practices. These obligations may necessitate changes to our information technologies, systems, and practices and to those of any third parties that process personal data on our behalf. Despite our efforts, we or third parties upon whom we rely may fail to comply with such obligations. If we fail, or are perceived to have failed, to address or comply with data privacy and security obligations, we could face significant consequences, including but not limited to, government enforcement actions, litigation, additional reporting requirements and/or oversight, bans on processing personal data and orders to destroy or not use personal data. Any of these events could have a material adverse effect on our reputation, business, or financial condition.

We have exposure to additional tax liabilities and our operating results may be adversely impacted by higher than expected tax rates and other tax-related factors.

We are subject to complex income tax laws and regulations, as well as non-income-based taxes, in various jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes and other tax liabilities. We are regularly under audit by tax authorities in different jurisdictions. For example, we are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019 and undergoing tax audits in Germany, Israel and India. Although we believe our tax estimates are reasonable, any adverse outcome could increase our worldwide effective tax rate, increase the amount of non-income taxes imposed on our business, and harm our financial position, results of operations, net income, and cash flows.

Further, changes in tax laws may materially impact our results of operations, or the way we conduct our business. These include changes to U.S. tax laws and regulations, such as the Inflation Reduction Act, which implements a 15% minimum tax on book income and a 1% excise tax on net stock repurchases and parts of which became effective for us in fiscal year 2023. It is possible that these changes, or other tax law changes, could increase our future tax liability or cause other adverse impacts. Most of our income is taxable in the United States, with a significant portion qualifying for preferential treatment as foreign-derived intangible income, or FDII. If U.S. tax rates increase or the FDII deduction is reduced, our provision for income taxes, results of operations, net income and cash flows would be adversely affected. In addition, changes in the tax laws of foreign jurisdictions could arise as a result of the base erosion and profit shifting project undertaken by the Organization for Economic Co-operation and Development, or OECD. The OECD recommended changes to long-standing tax principles and continues to develop new proposals, including allocating greater taxing rights to countries where customers are located and establishing a minimum tax on global income. These changes, as adopted by countries, may increase tax uncertainty and adversely affect our provision for income taxes, results of operations and financial condition.

Our future effective tax rate may also be affected by a variety of factors, including changes in our business or statutory rates, the mix of earnings in countries with differing statutory tax rates, available tax incentives, credits and deductions, the expiration of statute of limitations and settlements of tax audits, changes in accounting principles, adjustments to income taxes upon finalization of tax returns, increases in expenses not deductible for tax purposes, the valuation of our deferred tax assets and liabilities and deferred tax valuation allowances, changing interpretation of existing laws or regulations, the impact of accounting for business combinations, as well as changes in the domestic or international organization of our business and structure. Furthermore, the tax effects of accounting for stock-based compensation and volatility in our stock price may significantly impact our effective tax rate in the period in which they occur. A decline in our stock price may result in reduced future tax benefits from stock-based compensation, increase our effective tax rate, and adversely affect our financial results.

Our business is exposed to the risks associated with litigation, investigations and regulatory proceedings.

We currently and will likely continue to face legal, administrative and regulatory proceedings, claims, demands and/or investigations involving shareholder, consumer, competition and/or other issues relating to

our business. For example, we are defending on appeal the dismissal of a securities class action lawsuit from multiple shareholders asserting claims that we and certain of our officers made false and/or misleading statements related to channel inventory and the impact of cryptocurrency mining on GPU demand in 2017 and 2018. Litigation and regulatory proceedings are inherently uncertain, and adverse rulings could occur, including monetary damages or fines, or an injunction stopping us from manufacturing or selling certain products, engaging in certain business practices, or requiring other remedies, such as compulsory licensing of patents. An unfavorable outcome or settlement may result in a material adverse impact. Regardless of the outcome, litigation can be costly, time-consuming, and disruptive to our operations.

Our indebtedness could adversely affect our financial position and cash flows from operations, and prevent us from implementing our strategy or fulfilling our contractual obligations.

As of January 29, 2023, we had outstanding a total of \$11 billion in notes due by 2060. As each series of senior notes matures, unless redeemed or repurchased, we must repay or refinance the notes. If we decide to refinance, we may receive less favorable terms, or we may be unable to refinance at all, which may adversely affect our financial condition. We also have a \$575 million commercial paper program.

Maintenance of our current and future indebtedness and contractual restrictions could cause us to dedicate a substantial portion of our cash flows from operations towards debt service obligations and principal repayments; increase our vulnerability to adverse changes in general economic, industry and competitive conditions; limit our flexibility regarding changes in our business and our industry; impair our ability to obtain future financing; and restrict our ability to grant liens on property, enter into certain mergers, dispose of our assets, or materially change our business.

Our ability to comply with the covenants in our indenture may be affected by events beyond our control. If we breach any of the covenants without a waiver from the note holders or lenders, then any outstanding indebtedness may be declared immediately due and payable. Changes to our credit rating may negatively impact the value and liquidity of our securities, restrict our ability to obtain future financing and affect the terms of any such financing.

Delaware law and our certificate of incorporation, bylaws and agreement with Microsoft could delay or prevent a change in control.

The anti-takeover provisions of the Delaware General Corporation Law may discourage, delay, or prevent a change in control. Provisions in our certificate of incorporation and bylaws could make it more difficult for a third party to acquire a majority of our outstanding stock. These provisions include the ability of our Board of Directors to create and issue preferred stock, change the number of directors, and to make, amend or repeal our bylaws without prior shareholder approval; the inability of our shareholders to act by written consent or call special meetings; advance notice requirements for director nominations and shareholder proposals; and a super-majority voting requirement to amend some provisions in our certificate of incorporation and bylaws. Under our agreement with Microsoft for the Xbox, if someone makes an offer to purchase at least 30% of our outstanding common stock, Microsoft may have first and last rights of refusal to purchase the stock. These provisions could delay or prevent a change in control of NVIDIA, discourage proxy contests, and make it more difficult for shareholders to elect directors of their choosing and to cause us to take other corporate actions they desire.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our headquarters is in Santa Clara, California. We own and lease approximately 3 million square feet of office and building space for our corporate headquarters. In addition, we lease data center space in Santa Clara, California. We also own and lease facilities for data centers, research and development, and/or sales and administrative purposes throughout the U.S. and in various international locations, primarily in China, India, Israel, and Taiwan. We believe our existing facilities, both owned and leased, are in good condition and suitable for the conduct of our business. We do not identify or allocate assets by operating segment. For additional information regarding obligations under leases, refer to Note 3 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K, which information is hereby incorporated by reference.

ITEM 3. LEGAL PROCEEDINGS

Please see Note 13 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for a discussion of our legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the Nasdaq Global Select Market under the symbol NVDA. Public trading of our common stock began on January 22, 1999. Prior to that, there was no public market for our common stock. As of February 17, 2023, we had approximately 344 registered shareholders, not including those shares held in street or nominee name.

Issuer Purchases of Equity Securities

On May 23, 2022, our Board of Directors increased and extended our share repurchase program to repurchase additional common stock up to a total of \$15 billion through December 2023. Since the inception of our share repurchase program, we have repurchased an aggregate of 1.10 billion shares for a total cost of \$17.12 billion through January 29, 2023. During fiscal year 2023, we repurchased 63 million shares for \$10.04 billion. As of January 29, 2023, we are authorized, subject to certain specifications, to repurchase shares of our common stock up to \$7.23 billion through December 2023.

The repurchases can be made in the open market, in privately negotiated transactions, pursuant to a Rule 10b5-1 trading plan or in structured share repurchase programs, and can be made in one or more larger repurchases, in compliance with Rule 10b-18 of the Exchange Act, subject to market conditions, applicable legal requirements, and other factors. The program does not obligate NVIDIA to acquire any particular amount of common stock and the program may be suspended at any time at our discretion.

In fiscal year 2023, we paid \$398 million in quarterly cash dividends. Our cash dividend program and the payment of future cash dividends under that program are subject to our Board of Directors' continuing determination that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

The following table presents details of our share repurchase transactions during the fourth quarter of fiscal year 2023:

Period	Total Number of Shares Purchased (In millions)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program (In millions)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (In billions)
October 31, 2022 - November 27, 2022	7	\$ 148.11	7	\$ 7.23
November 28, 2022 - December 25, 2022	—	\$ —	—	\$ 7.23
December 26, 2022 - January 29, 2023	—	\$ —	—	\$ 7.23
Total	7		7	

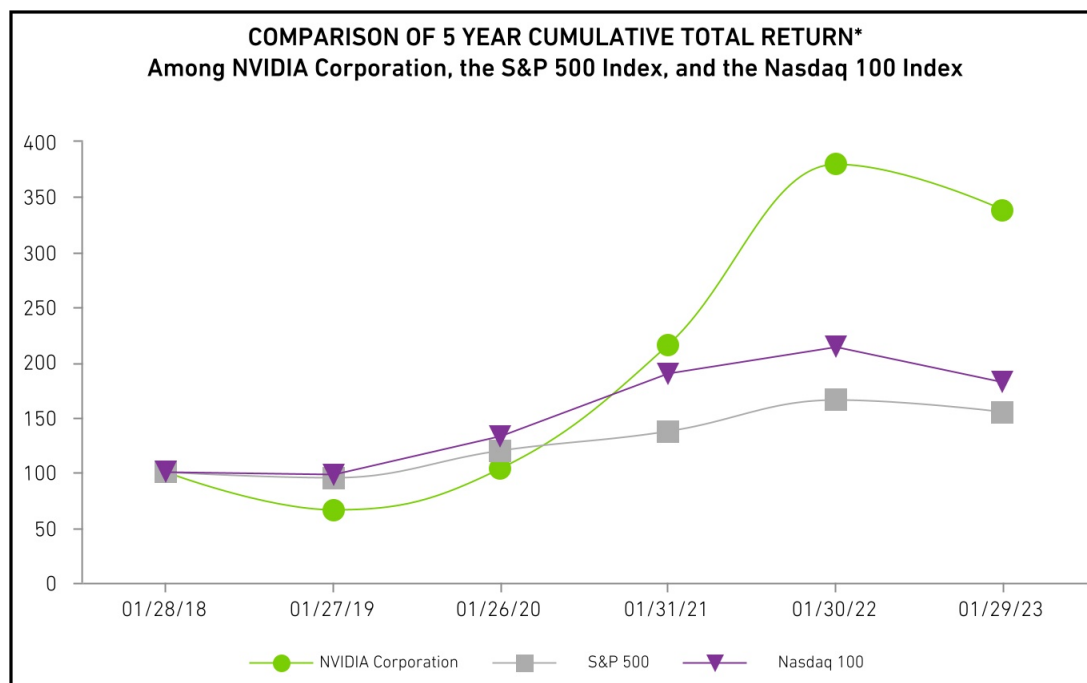
Restricted Stock Unit Share Withholding

We withhold common stock shares associated with net share settlements to cover tax withholding obligations upon the vesting of restricted stock unit awards under our employee equity incentive program. During fiscal year 2023, we withheld approximately 8 million shares for a total value of \$1.48 billion

through net share settlements. Refer to Note 4 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for further discussion regarding our equity incentive plans.

Stock Performance Graphs

The following graph compares the cumulative total shareholder return for our common stock, the S&P 500 Index, and the Nasdaq 100 Index for the five years ended January 29, 2023. The graph assumes that \$100 was invested on January 28, 2018 in our common stock and in each of the S&P 500 Index and the Nasdaq 100 Index. Our common stock is a component of each of the presented indices. Total return assumes reinvestment of dividends in each of the indices indicated. Total return is based on historical results and is not intended to indicate future performance.



*\$100 invested on 1/28/18 in stock and in indices, including reinvestment of dividends.

Source: FactSet financial data and analytics.

	1/28/2018	1/27/2019	1/26/2020	1/31/2021	1/30/2022	1/29/2023
NVIDIA Corporation	\$ 100.00	\$ 66.00	\$ 103.63	\$ 215.33	\$ 378.94	\$ 338.18
S&P 500	\$ 100.00	\$ 94.60	\$ 119.36	\$ 137.01	\$ 165.79	\$ 154.80
Nasdaq 100	\$ 100.00	\$ 97.69	\$ 133.01	\$ 189.72	\$ 213.63	\$ 181.38

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with "Item 1A. Risk Factors", our Consolidated Financial Statements and related Notes thereto, as well as other cautionary statements and risks described elsewhere in this Annual Report on Form 10-K, before deciding to purchase, hold or sell shares of our common stock.

Overview

Our Company and Our Businesses

NVIDIA pioneered accelerated computing to help solve the most challenging computational problems. Since our original focus on PC graphics, we have expanded to several other large and important computationally intensive fields. Fueled by the sustained demand for exceptional 3D graphics and the scale of the gaming market, NVIDIA has leveraged its GPU architecture to create platforms for scientific computing, AI, data science, AV, robotics, metaverse and 3D internet applications.

Our two operating segments are "Compute & Networking" and "Graphics." Refer to Note 17 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Headquartered in Santa Clara, California, NVIDIA was incorporated in California in April 1993 and reincorporated in Delaware in April 1998.

Recent Developments, Future Objectives and Challenges

Supply, Products Transitions, and New Products and Business Models

Our supply, which includes inventory on hand, purchase obligations and prepaid supply agreements, has grown significantly due to current supply chain conditions, complexity of our products, and recent reductions in demand. At the end of fiscal year 2023, purchase obligations and prepaid supply agreements represented more than half of our total supply. Inventory provisions for excess inventory and purchase obligations totaled \$2.17 billion in fiscal year 2023. We may incur inventory provisions if our inventory or supply commitments are misaligned with demand for our products.

Product transitions are complex as we often ship both new and legacy architecture products simultaneously and we and our channel partners prepare to ship and support new products. We are currently transitioning the architecture of our Data Center, Professional Visualization, and Gaming products. Qualification time for new products, customers anticipating product transitions and channel partners reducing channel inventory of legacy architectures ahead of new product introductions can create reductions or volatility in our revenue. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult and prior trends may not continue.

We build technology and products for use cases and applications that may be new or may not yet exist. Examples include our Omniverse platform and third-party large language models and generative models. Our demand estimates for these use cases and applications can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate any revenue from these use cases and applications.

NVIDIA AI Cloud Service Offerings

We will offer enterprise customers NVIDIA AI cloud services directly and through our network of partners. Examples of these services include NVIDIA DGX Cloud, which is cloud-based infrastructure and software for training AI models, and customizable pretrained AI models. NVIDIA has partnered with leading cloud service providers to host these services in their data centers.

We entered into multi-year cloud service agreements in the second half of fiscal year 2023 to these offerings and our research and development activities. NVIDIA AI cloud services may not be successful and will take time, resources and investment. We also offer or plan to offer standalone software solutions for AI including NVIDIA AI Enterprise, NVIDIA Omniverse, NVIDIA DRIVE for automotive, and several other software solutions. These new business models or strategies may not be successful and we may fail to sell any meaningful standalone software or as-a-service solutions. We may incur significant costs and may not achieve any significant revenue from these offerings.

Global Trade

During the third quarter of fiscal year 2023, the USG announced new license requirements that, with certain exceptions, impact exports to China (including Hong Kong and Macau) and Russia of our A100 and H100 integrated circuits, DGX or any other systems or boards which incorporate A100 or H100 integrated circuits and our A100X. We are required to transition certain operations out of China (including Hong Kong), including research and development and supply and distribution operations. We have engaged with customers in China to provide alternative products not subject to the new license requirements, such as our new A800 offering.

Management of these new license and other requirements is complicated and time consuming. Our results and competitive position may be harmed if customers in China do not want to purchase our alternative product offerings, if customers purchase product from competitors, or if customers develop their own internal solution, if the USG does not grant licenses in a timely manner or denies licenses to significant customers, or if we incur significant transition costs.

COVID-19

During fiscal year 2023, we reopened our offices worldwide. We incurred incremental expenses and related in-office costs as we ramped onsite services.

Restrictions may be imposed or reinstated as the pandemic resurfaces, such as lockdown measures due to COVID-19 containment efforts in China. During fiscal year 2023, end customer sales for our products in China have been negatively impacted by lockdowns and this impact may continue if lockdowns return. COVID-19-related disruptions have created and may continue to create supply chain and logistics constraints. Challenges in estimating demand could become more pronounced or volatile in the future on both a global and regional basis.

Russia

In fiscal year 2023, we stopped direct sales to Russia and later in the year, we closed business operations in Russia. Direct sales to Russia in fiscal year 2022 were immaterial. Our revenue to partners that sell into Russia may have been negatively impacted due to the war in Ukraine.

Termination of the Arm Share Purchase Agreement

In February 2022, NVIDIA and SoftBank announced the termination of the Share Purchase Agreement whereby NVIDIA would have acquired Arm from SoftBank due to significant regulatory challenges preventing the completion of the transaction. We recorded an acquisition termination cost of \$1.35 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

Fiscal Year 2023 Summary

	Year Ended		
	January 29, 2023	January 30, 2022	Change
(\$ in millions, except per share data)			
Revenue	\$ 26,974	\$ 26,914	— %
Gross margin	56.9 %	64.9 %	Down 8.0 pts
Operating expenses	\$ 11,132	\$ 7,434	Up 50%
Income from operations	\$ 4,224	\$ 10,041	Down 58%
Net income	\$ 4,368	\$ 9,752	Down 55%
Net income per diluted share	\$ 1.74	\$ 3.85	Down 55%

We specialize in markets where our computing platforms can provide tremendous acceleration for applications. These platforms incorporate processors, interconnects, software, algorithms, systems, and services to deliver unique value. Our platforms address four large markets where our expertise is critical: Data Center, Gaming, Professional Visualization, and Automotive.

Revenue for fiscal year 2023 revenue was \$26.97 billion, flat compared with a year ago.

Data Center revenue was up 41% from a year ago led by strong growth from hyperscale customers and also reflects purchases made by several CSP partners to support multi-year cloud service agreements for our new NVIDIA AI cloud service offerings and our research and development activities.

Gaming revenue was down 27% from a year ago reflecting lower sell-in to partners to help reduce channel inventory levels as global macro-economic conditions and COVID-19 related disruptions in China weighed on gaming demand.

Professional Visualization revenue was down 27% from a year ago reflecting a lower sell-in to partners to help reduce channel inventory levels.

Automotive revenue was up 60% from a year ago reflecting growth in sales of self-driving solutions, computing solutions for electric vehicle makers and strength in sales of AI cockpit solutions. The increase also included growth in automotive development arrangements.

OEM and Other revenue was down 61% from a year ago driven by notebook OEM and CMP. CMP revenue was nominal in fiscal year 2023 and \$550 million in fiscal year 2022.

Gross margin for fiscal year 2023 declined from a year ago, driven by \$2.17 billion of inventory charges largely relating to excess supply of NVIDIA Ampere architecture Gaming and Data Center products as compared to the demand expectations for these products, particularly for the expected demand in China. The inventory charges were comprised of \$1.04 billion for inventory on hand and \$1.13 billion for inventory purchase obligations in excess of our demand expectations.

Operating expenses, which included a \$1.35 billion acquisition termination charge related to the Arm transaction, were up 50% from a year ago. The increase also reflected compensation, data center infrastructure, and engineering development costs.

Cash, cash equivalents and marketable securities were \$13.30 billion.

During fiscal year 2023, we returned \$10.44 billion to shareholders in the form of share repurchases and cash dividends. As of the end of fiscal year 2023, we had \$7.23 billion remaining under our share repurchase authorization through December 2023.

Market Platform Highlights

Data Center revenue for fiscal year 2023 was \$15.01 billion, up 41% from fiscal year 2022. The strong growth in Data Center revenue was influenced by hyperscaler and cloud usage of our accelerated computing platforms and networking portfolio. In Data Center, we announced the NVIDIA Hopper GPU architecture and began ramping the first products based on the architecture, including the NVIDIA H100 Tensor Core GPU. The NVIDIA OVX server reference design launched for digital twins and other Omniverse applications. We completed two new large language models for cloud AI services — NVIDIA NeMo LLM and NVIDIA BioNeMo LLM. Additionally, we announced the NVIDIA Spectrum-4 end-to-end 400Gbps networking platform and began shipping Quantum-2 in December 2022.

Gaming revenue for fiscal year 2023 was \$9.07 billion, down 27% from fiscal year 2022. Gaming results were influenced by the rapid change in economic conditions causing excess inventory with our channel partners. We introduced pricing programs for our channel partners and started undershipping GPU supply to the partners so that we could lower inventory in the channel. As we exited fiscal year 2023, we have made meaningful progress in establishing lower inventory levels with our channel partners. In Gaming, we announced the new Ada Lovelace GPU architecture, and introduced the first products based on Ada, including the GeForce RTX 4090, RTX 4080, and RTX 4070 Ti desktop GPUs and laptop GPUs featured in over 170 laptop designs. We introduced NVIDIA DLSS 3 for over 50 games and applications. We brought GeForce RTX 4080-class performance to the GeForce NOW Ultimate membership tier.

Professional Visualization revenue for fiscal year 2023 was \$1.54 billion, down 27% from fiscal year 2022. Professional Visualization results were influenced by the rapid change in economic conditions causing excess inventory with our OEM partners. In Professional Visualization, we added new NVIDIA Ampere architecture RTX GPUs for workstations. We also announced Omniverse Avatar Cloud Engine and Omniverse Cloud and released a major update to NVIDIA Omniverse Enterprise.

Automotive revenue for fiscal year 2023 grew 60% compared to fiscal year 2022 to \$903 million. In Automotive, we started production of the NVIDIA DRIVE Orin autonomous vehicle SOC and introduced next-generation NVIDIA DRIVE Thor.

Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, cost of revenue, expenses and related disclosure of contingencies. On an on-going basis, we evaluate our estimates, including those related to inventories, revenue recognition, and income taxes. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

We believe the following critical accounting policies affect our significant judgments and estimates used in the preparation of our consolidated financial statements. Our management has discussed the development and selection of these critical accounting policies and estimates with the Audit Committee of our Board of Directors. The Audit Committee has reviewed our disclosures relating to our critical accounting policies and estimates in this Annual Report on Form 10-K.

Inventories

Inventory cost is computed on an adjusted standard basis, which approximates actual cost on an average or first-in, first-out basis. We charge cost of sales for inventory provisions to write-down our inventory to the lower of cost or net realizable value or for obsolete or excess inventory, and for excess product purchase commitments. Most of our inventory provisions relate to excess quantities of products or components, based on our inventory levels and future product purchase commitments compared to assumptions about future demand and market conditions, which requires management judgment.

Situations that may result in excess or obsolete inventory or excess product purchase commitments include changes in business and economic conditions, changes in market conditions, sudden and significant decreases in demand for our products, inventory obsolescence because of changing technology and customer requirements, new product introductions resulting in less demand for existing products or inconsistent spikes in demand due to unexpected end use cases, failure to estimate customer demand properly, ordering in advance of historical lead-times and the impact of changes in future demand, or increase in demand for competitive products, including competitive actions. Cancellation or deferral of customer purchase orders could result in our holding excess inventory.

The overall net effect on our gross margin from inventory provisions and sales of items previously written down was an unfavorable impact of 7.5% in fiscal year 2023 and 0.9% in fiscal year 2022. As a fabless semiconductor company, we must make commitments to purchase inventory based on forecasts of future customer demand. In doing so, we must account for our third-party manufacturers' lead times and constraints. In the past, our manufacturing lead times have been long, and in some cases, extended beyond twelve months for some products. We place non-cancellable inventory orders for certain product components in advance of our historical lead times, pay premiums and provide deposits to secure future supply and capacity. We also adjust to other market factors, such as product offerings and pricing actions by our competitors, new product transitions, and macroeconomic conditions - all of which may impact demand for our products.

Refer to the Gross Profit and Gross Margin discussion below in this Management's Discussion and Analysis for further discussion.

Revenue Recognition

We derive our revenue from product sales, including hardware and systems, license and development arrangements, software licensing, and cloud services. We determine revenue recognition through the following steps: (1) identification of the contract with a customer; (2) identification of the performance obligations in the contract; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contract (where revenue is allocated on a relative standalone selling

price basis by maximizing the use of observable inputs to determine the standalone selling price for each performance obligation); and (5) recognition of revenue when, or as, we satisfy a performance obligation.

Product Sales Revenue

Revenue from product sales is recognized upon transfer of control of products to customers in an amount that reflects the consideration we expect to receive in exchange for those products. Certain products are sold with support or an extended warranty for the incorporated system, hardware, and/or software. Support and extended warranty revenue are recognized ratably over the service period, or as services are performed. Revenue is recognized net of allowances for returns, customer programs and any taxes collected from customers.

For products sold with a right of return, we record a reduction to revenue by establishing a sales return allowance for estimated product returns at the time revenue is recognized, based primarily on historical return rates. However, if product returns for a fiscal period are anticipated to exceed historical return rates, we may determine that additional sales return allowances are required to properly reflect our estimated exposure for product returns.

Our customer programs involve rebates, which are designed to serve as sales incentives to resellers of our products in various target markets, and marketing development funds, or MDFs, which represent monies paid to our partners that are earmarked for market segment development and are designed to support our partners' activities while also promoting NVIDIA products. We account for customer programs as a reduction to revenue and accrue for potential rebates and MDFs based on the amount we expect to be claimed by customers.

License and Development Arrangements

Our license and development arrangements with customers typically require significant customization of our IP components. As a result, we recognize the revenue from the license and the revenue from the development services as a single performance obligation over the period in which the development services are performed. We measure progress to completion based on actual cost incurred to date as a percentage of the estimated total cost required to complete each project. If a loss on an arrangement becomes probable during a period, we record a provision for such loss in that period.

Refer to Note 1 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Income Taxes

We recognize federal, state and foreign current tax liabilities or assets based on our estimate of taxes payable or refundable in the current fiscal year by tax jurisdiction. We recognize federal, state and foreign deferred tax assets or liabilities, as appropriate, for our estimate of future tax effects attributable to temporary differences and carryforwards; and we record a valuation allowance to reduce any deferred tax assets by the amount of any tax benefits that, based on available evidence and judgment, are not expected to be realized.

Our calculation of deferred tax assets and liabilities is based on certain estimates and judgments and involves dealing with uncertainties in the application of complex tax laws. Our estimates of deferred tax assets and liabilities may change based, in part, on added certainty or finality to an anticipated outcome, changes in accounting standards or tax laws in the United States, or foreign jurisdictions where we operate, or changes in other facts or circumstances. In addition, we recognize liabilities for potential United States and foreign income tax contingencies based on our estimate of whether, and the extent to which, additional taxes may be due. If we determine that payment of these amounts is unnecessary or if the recorded tax liability is less than our current assessment, we may be required to recognize an income tax benefit or additional income tax expense in our financial statements accordingly.

As of the end of fiscal years 2023 and 2022, we had a valuation allowance of \$1.48 billion and \$907 million, respectively, related to capital loss carryforwards, state, and certain other deferred tax assets that management determined not likely to be realized due, in part, to jurisdictional projections of future taxable income, including capital gains. To the extent realization of the deferred tax assets becomes more-likely-than-not, we would recognize such deferred tax assets as income tax benefits during the period.

We recognize the benefit from a tax position only if it is more-likely-than-not that the position would be sustained upon audit based solely on the technical merits of the tax position. Our policy is to include interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Refer to Note 14 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Change in Accounting Estimate

In February 2023, we completed an assessment of the useful lives of our property, plant, and equipment. Based on advances in technology and usage rate, we increased the estimated useful life of a majority of the server, storage, and network equipment from three years to a range of four to five years, and assembly and test equipment from five years to seven years. This change in accounting estimate became effective at the beginning of fiscal year 2024. Based on the carrying amounts of a majority of our server, storage, network, and assembly and test equipment, net in use as of the end of fiscal year 2023, it is estimated this change will increase our fiscal year 2024 operating income by \$133 million as a result of the reduction in depreciation expense.

Results of Operations

A discussion regarding our financial condition and results of operations for fiscal year 2023 compared to fiscal year 2022 is presented below. A discussion regarding our financial condition and results of operations for fiscal year 2022 compared to fiscal year 2021 can be found under Item 7 in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022, filed with the SEC on March 18, 2022, which is available free of charge on the SEC's website at <http://www.sec.gov> and at our investor relations website, <http://investor.nvidia.com>.

The following table sets forth, for the periods indicated, certain items in our Consolidated Statements of Income expressed as a percentage of revenue.

	Year Ended	
	January 29, 2023	January 30, 2022
Revenue	100.0 %	100.0 %
Cost of revenue	43.1	35.1
Gross profit	56.9	64.9
Operating expenses		
Research and development	27.2	19.6
Sales, general and administrative	9.1	8.0
Acquisition termination cost	5.0	—
Total operating expenses	41.3	27.6
Income from operations	15.6	37.3
Interest income	1.0	0.1
Interest expense	(1.0)	(0.9)
Other, net	(0.1)	0.4
Other income (expense), net	(0.1)	(0.4)
Income before income tax	15.5	36.9
Income tax expense (benefit)	(0.7)	0.7
Net income	16.2 %	36.2 %

Revenue

Revenue by Reportable Segments

	Year Ended			
	January 29, 2023	January 30, 2022	\$ Change	% Change
	(\$ in millions)			
Compute & Networking	\$ 15,068	\$ 11,046	\$ 4,022	36 %
Graphics	11,906	15,868	(3,962)	(25) %
Total	\$ 26,974	\$ 26,914	\$ 60	— %

Compute & Networking - The year-on-year increase was led by growth from hyperscale customers and also reflects purchases made by several CSP partners to support multi-year cloud service agreements for our new NVIDIA AI cloud service offerings and our research and development activities. The increase was also related to the growth in Automotive. CMP contributed an insignificant amount in fiscal year 2023 compared to \$550 million in fiscal year 2022.

Graphics - The year-on-year decrease primarily reflects lower sell-in to partners to help reduce channel inventory levels as global macro-economic conditions and COVID-19 related disruptions in China weighed on gaming demand.

Concentration of Revenue

Revenue from sales to customers outside of the United States accounted for 69% and 84% of total revenue for fiscal years 2023 and 2022, respectively. The decline in revenue outside the U.S. was primarily driven by China and Taiwan related to Data Center and Gaming. Revenue by geographic region is allocated to countries based on the billed location even if the revenue may be attributable to end customers in a different location.

No customer represented 10% or more of total revenue for fiscal years 2023 and 2022.

Gross Profit and Gross Margin

Gross profit consists of total revenue, net of allowances, less cost of revenue. Cost of revenue consists primarily of the cost of semiconductors, including wafer fabrication, assembly, testing and packaging, board and device costs, manufacturing support costs, including labor and overhead associated with such purchases, final test yield fallout, inventory and warranty provisions, memory and component costs, tariffs, and shipping costs. Cost of revenue also includes acquisition-related costs, development costs for license and service arrangements, IP-related costs, and stock-based compensation related to personnel associated with manufacturing operations.

Gross margin was 56.9% and 64.9% for fiscal years 2023 and 2022, respectively. The decrease in fiscal year 2023 was primarily due to \$2.17 billion of inventory provisions in fiscal year 2023, which consists of approximately \$1.04 billion for inventory on hand and approximately \$1.13 billion for inventory purchase obligations in excess of our current demand projections.

Inventory provisions totaled \$2.17 billion and \$354 million for fiscal years 2023 and 2022, respectively. Sales of inventory that was previously written-off totaled \$137 million and \$111 million for fiscal years 2023 and 2022, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 7.5% and 0.9% in fiscal years 2023 and 2022, respectively.

Compute & Networking - The gross margin of our Compute & Networking segment decreased during fiscal year 2023 when compared to fiscal year 2022, primarily due to inventory provisions.

Graphics - The gross margin of our Graphics segment decreased during fiscal year 2023 when compared to fiscal year 2022, primarily due to inventory and related provisions and lower margins of GeForce GPUs.

Operating Expenses

	Year Ended			
	January 29, 2023	January 30, 2022	\$ Change	% Change
	(\$ in millions)			
Research and development expenses	\$ 7,339	\$ 5,268	\$ 2,071	39 %
% of revenue	27.2 %	19.6 %		
Sales, general and administrative expenses	2,440	2,166	274	13 %
% of revenue	9.1 %	8.0 %		
Acquisition termination cost	1,353	—	1,353	100 %
% of revenue	5.0 %	— %		
Total operating expenses	<u>\$ 11,132</u>	<u>\$ 7,434</u>	<u>\$ 3,698</u>	50 %
% of revenue	41.3 %	27.6 %		

The increase in research and development expense for fiscal year 2023 was primarily driven by increased compensation, employee growth, engineering development costs, and data center infrastructure.

The increase in sales, general and administrative expense for fiscal year 2023 was primarily driven by increased compensation and employee growth.

We recorded an acquisition termination cost related to the Arm transaction of \$1.35 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

Other Income (Expense), Net

	Year Ended			
	January 29, 2023	January 30, 2022	\$ Change	% Change
	(\$ in millions)			
Interest income	\$ 267	\$ 29	\$ 238	821 %
Interest expense	(262)	(236)	(26)	11 %
Other, net	(48)	107	(155)	(145) %
Other income (expense), net	<u>\$ (43)</u>	<u>\$ (100)</u>	<u>\$ 57</u>	(57) %

Interest income consists of interest earned on cash, cash equivalents and marketable securities. The increase in interest income was primarily due to higher yields earned on our investments.

Interest expense is primarily comprised of coupon interest and debt discount amortization related to our notes. The increase in expense reflects interest on the \$5.00 billion debt offering issued in June 2021.

Other, net, consists primarily of realized or unrealized gains and losses from investments in non-affiliated entities and the impact of changes in foreign currency rates. Change in other, net, compared to fiscal year 2022 was primarily driven by mark-to-market losses from publicly traded equity investments and changes in value from our non-affiliated private investments. Refer to Note 8 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information regarding our investments in non-affiliated entities.

Income Taxes

We recognized income tax benefit of \$187 million for fiscal year 2023 and income tax expense of \$189 million for fiscal year 2022. Income tax as a percentage of income before income tax was a benefit of 4.5% for fiscal year 2023 and an expense of 1.9% for fiscal year 2022.

Beginning in fiscal year 2023, the 2017 Tax Cuts and Jobs Act, or TCJA, requires taxpayers to capitalize research and development expenditures and to amortize domestic expenditures over five years and foreign expenditures over fifteen years.

The fiscal year 2023 effective tax rate includes the mandatory capitalization and amortization of research and development expenses beginning in fiscal year 2023, which resulted in a greater FDII deduction and significantly increased current taxes, with a corresponding deferred tax benefit at the relevant statutory tax rate.

The decrease in our effective tax rate in fiscal year 2023 as compared to fiscal year 2022 was primarily due to increased tax benefits of the FDII deduction, stock-based compensation, and the U.S. federal research tax credit, relative to lower profitability. This is partially offset by the impact of an increase in the proportion of earnings subject to U.S. tax in fiscal year 2023 and the one-time benefits of the domestication of a foreign subsidiary in fiscal year 2022, or the Domestication.

Our effective tax rate for fiscal year 2023 was lower than the U.S. federal statutory rate of 21% due primarily to tax benefits from the FDII deduction, tax benefits related to stock-based compensation and the U.S. federal research tax credit.

Our effective tax rate for fiscal year 2022 was lower than the U.S. federal statutory rate of 21% due to tax benefits from the FDII deduction, income earned in jurisdictions that are subject to taxes lower than the U.S. federal statutory tax rate, excess tax benefits related to stock-based compensation, recognition of U.S. federal research tax credit and the one-time benefits of the Domestication.

Refer to Note 14 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Liquidity and Capital Resources

	January 29, 2023	January 30, 2022
	<i>(In millions)</i>	
Cash and cash equivalents	\$ 3,389	\$ 1,990
Marketable securities	9,907	19,218
Cash, cash equivalents, and marketable securities	<u>\$ 13,296</u>	<u>\$ 21,208</u>

	Year Ended	
	January 29, 2023	January 30, 2022
	<i>(In millions)</i>	
Net cash provided by operating activities	\$ 5,641	\$ 9,108
Net cash provided by (used in) investing activities	\$ 7,375	\$ (9,830)
Net cash provided by (used in) financing activities	\$ (11,617)	\$ 1,865

As of January 29, 2023, we had \$13.30 billion in cash, cash equivalents and marketable securities, a decrease of \$7.91 billion from the end of fiscal year 2022. Our investment policy requires the purchase of highly rated fixed income securities, the diversification of investment types and credit exposures, and certain maturity limits on our portfolio.

Cash provided by operating activities decreased in fiscal year 2023 compared to fiscal year 2022, primarily due to a decrease in net income adjusted for certain non-cash items, such as the Arm acquisition termination cost of \$1.35 billion, and higher tax payments, partially offset by changes in working capital. Changes in working capital were primarily driven by lower accounts receivable due to strong collections partially offset by timing of supplier payments and inventory deliveries.

Cash provided by investing activities increased in fiscal year 2023 compared to fiscal year 2022, primarily driven by lower purchases and higher sales and maturities of marketable securities, offset by higher capital expenditures.

Cash used in financing activities increased in fiscal year 2023 compared to fiscal year 2022, due to share repurchases and the absence of debt issuance proceeds in fiscal year 2023, offset by absence of debt repayment.

Liquidity

Our primary sources of liquidity are our cash and cash equivalents, our marketable securities, and cash generated by our operations. At the end of fiscal year 2023, we had \$13.30 billion in cash, cash equivalents and marketable securities. We believe that we have sufficient liquidity to meet our operating requirements for at least the next twelve months, and for the foreseeable future, including our future supply obligations and \$1.25 billion of debt repayment due in fiscal year 2024. We continuously evaluate our liquidity and capital resources, including our access to external capital, to ensure we can finance future capital requirements.

Our marketable securities consist of debt securities issued by the U.S. government and its agencies, highly rated corporations and financial institutions, and foreign government entities, as well as certificates of deposit issued by highly rated financial institutions. These marketable securities are primarily denominated in U.S. dollars. Refer to Note 8 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

During fiscal year 2024, we expect to use our existing cash and cash equivalents, our marketable securities, and the cash generated by our operations to fund our capital investments of approximately \$1.10 billion to \$1.30 billion related to property and equipment.

Except for approximately \$1.38 billion of cash, cash equivalents, and marketable securities held outside the U.S. for which we have not accrued any related foreign or state taxes if we repatriate these amounts to the U.S., substantially all of our cash, cash equivalents and marketable securities held outside of the U.S. at the end of fiscal year 2023 are available for use in the U.S. without incurring additional U.S. federal income taxes.

Beginning in fiscal year 2023, the TCJA requires taxpayers to capitalize research and development expenditures and to amortize domestic expenditures over five years and foreign expenditures over fifteen years. The adverse cash flow impact of mandatory capitalization will be reduced in future years as capitalized research and development expenditures continue to amortize. Refer to Note 14 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Capital Return to Shareholders

During fiscal year 2023, we returned \$10.04 billion in share repurchases and \$398 million in quarterly cash dividends. Our cash dividend program and the payment of future cash dividends under that program are subject to our Board of Directors' continuing determination that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

As of January 29, 2023, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to \$7.23 billion through December 2023.

Outstanding Indebtedness and Commercial Paper Program

Our aggregate debt maturities as of January 29, 2023, by year payable, are as follows:

	January 29, 2023
	<i>(In millions)</i>
Due in one year	\$ 1,250
Due in one to five years	2,250
Due in five to ten years	4,000
Due in greater than ten years	3,500
Unamortized debt discount and issuance costs	(47)
Net carrying amount	10,953
Less short-term portion	(1,250)
Total long-term portion	\$ 9,703

We have a \$575 million commercial paper program to support general corporate purposes. As of the end of fiscal year 2023, we had not issued any commercial paper.

Refer to Note 12 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for further discussion.

Material Cash Requirements and Other Obligations

For a description of our long-term debt, purchase obligations, and operating lease obligations, refer to Note 12, Note 13, and Note 3 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K, respectively.

We have unrecognized tax benefits of \$1.02 billion, which includes related interest and penalties of \$95 million, recorded in non-current income tax payable at the end of fiscal year 2023. We are unable to reasonably estimate the timing of any potential tax liability, interest payments, or penalties in individual years due to uncertainties in the underlying income tax positions and the timing of the effective settlement of such tax positions. We are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019. Refer to Note 14 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for further information.

Climate Change

To date, there has been no material impact to our results of operations associated with global sustainability regulations, compliance, costs from sourcing renewable energy or climate-related business trends.

Adoption of New and Recently Issued Accounting Pronouncements

Refer to Note 1 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for a discussion of adoption of new and recently issued accounting pronouncements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Investment and Interest Rate Risk

We are exposed to interest rate risk related to our fixed-rate investment portfolio and outstanding debt. The investment portfolio is managed consistent with our overall liquidity strategy in support of both working capital needs and strategic growth of our businesses.

As of the end of fiscal year 2023, we performed a sensitivity analysis on our investment portfolio. According to our analysis, parallel shifts in the yield curve of both plus or minus 0.5% would result in changes in fair values for these investments of \$17 million.

As of the end of fiscal year 2023, we had \$11.00 billion of senior Notes outstanding. We carry the Notes at face value less unamortized discount on our Consolidated Balance Sheets. As the Notes bear interest at a fixed rate, we have no financial statement risk associated with changes in interest rates. Refer to Note 12 of

the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

Foreign Exchange Rate Risk

We consider our direct exposure to foreign exchange rate fluctuations to be minimal as our sales are in United States dollars and foreign currency forward contracts are used to offset movements of foreign currency exchange rate movements. Gains or losses from foreign currency remeasurement are included in other income or expense. The impact of foreign currency transaction gain or loss included in determining net income was not significant for fiscal years 2023 and 2022.

Sales and arrangements with third-party manufacturers provide for pricing and payment in United States dollars, and, therefore, are not subject to exchange rate fluctuations. Increases in the value of the United States' dollar relative to other currencies would make our products more expensive, which could negatively impact our ability to compete. Conversely, decreases in the value of the United States' dollar relative to other currencies could result in our suppliers raising their prices in order to continue doing business with us. Additionally, we have international operations and incur expenditures in currencies other than U.S. dollars. Our operating expenses benefit from a stronger dollar and are adversely affected by a weaker dollar. The primary currency we hedge is Israeli Shekel.

We use foreign currency forward contracts to mitigate the impact of foreign currency exchange rate movements on our operating expenses. We designate these contracts as cash flow hedges and assess the effectiveness of the hedge relationships on a spot to spot basis. Gains or losses on the contracts are recorded in accumulated other comprehensive income or loss, and then reclassified to operating expense when the related operating expenses are recognized in earnings or ineffectiveness should occur.

We also use foreign currency forward contracts to mitigate the impact of foreign currency movements on monetary assets and liabilities that are denominated in currencies other than U.S. dollar. These forward contracts were not designated for hedge accounting treatment. Therefore, the change in fair value of these contracts is recorded in other income or expense and offsets the change in fair value of the hedged foreign currency denominated monetary assets and liabilities, which is also recorded in other income or expense.

If the U.S. dollar strengthened by 10% as of January 29, 2023 and January 30, 2022, the amount recorded in accumulated other comprehensive income (loss) related to our foreign exchange contracts before tax effect would have been approximately \$112 million and \$103 million lower, respectively. Change in value recorded in accumulated other comprehensive income (loss) would be expected to offset a corresponding change in hedged forecasted foreign currency expenses when recognized.

If an adverse 10% foreign exchange rate change was applied to our balance sheet hedging contracts, it would have resulted in an adverse impact on income before taxes of approximately \$36 million and \$41 million as of January 29, 2023 and January 30, 2022, respectively. These changes in fair values would be offset in other income (expense), net by corresponding change in fair values of the foreign currency denominated monetary assets and liabilities, assuming the hedge contracts fully cover the foreign currency denominated monetary assets and liabilities balances.

Refer to Note 11 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item is set forth in our Consolidated Financial Statements and Notes thereto included in this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Controls and Procedures

Disclosure Controls and Procedures

Based on their evaluation as of January 29, 2023, our management, including our Chief Executive Officer and Chief Financial Officer, has concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) were effective to provide reasonable assurance.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of January 29, 2023 based on the criteria set forth in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the criteria set forth in *Internal Control — Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of January 29, 2023.

The effectiveness of our internal control over financial reporting as of January 29, 2023 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which is included herein.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended January 29, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. In fiscal year 2022, we began an upgrade of our enterprise resource planning, or ERP, system, which will update much of our existing core financial systems. The ERP system is designed to accurately maintain our financial records used to report operating results. The upgrade will occur in phases. During the second quarter of fiscal year 2023, we completed the consolidated financial reporting phase of the implementation, which included updating our internal control over financial reporting. We will continue to evaluate each quarter whether there are changes that materially affect our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls, 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 design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within NVIDIA have been detected.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable.

PART III

Certain information required by Part III is omitted from this report because we will file with the SEC a definitive proxy statement pursuant to Regulation 14A, or the 2023 Proxy Statement, no later than 120 days after the end of fiscal year 2023, and certain information included therein is incorporated herein by reference.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Identification of Directors

Information regarding directors required by this item will be contained in our 2023 Proxy Statement under the caption "Proposal 1 - Election of Directors," and is hereby incorporated by reference.

Identification of Executive Officers

Reference is made to the information regarding executive officers appearing under the heading "Information About Our Executive Officers" in Part I of this Annual Report on Form 10-K, which information is hereby incorporated by reference.

Identification of Audit Committee and Financial Experts

Information regarding our Audit Committee required by this item will be contained in our 2023 Proxy Statement under the captions "Report of the Audit Committee of the Board of Directors" and "Information About the Board of Directors and Corporate Governance," and is hereby incorporated by reference.

Material Changes to Procedures for Recommending Directors

Information regarding procedures for recommending directors required by this item will be contained in our 2023 Proxy Statement under the caption "Information About the Board of Directors and Corporate Governance," and is hereby incorporated by reference.

Delinquent Section 16(a) Reports

Information regarding compliance with Section 16(a) of the Exchange Act required by this item will be contained in our 2023 Proxy Statement under the caption "Delinquent Section 16(a) Reports," and is hereby incorporated by reference.

Code of Conduct

Information regarding our Code of Conduct required by this item will be contained in our 2023 Proxy Statement under the caption "Information About the Board of Directors and Corporate Governance - Code of Conduct," and is hereby incorporated by reference. The full text of our Code of Conduct and Financial Team Code of Conduct are published on the Investor Relations portion of our website, under Governance, at www.nvidia.com. If we make any amendments to either code, or grant any waiver from a provision of either code to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website or in a report on Form 8-K. The contents of our website are not a part of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding our executive compensation required by this item will be contained in our 2023 Proxy Statement under the captions "Executive Compensation", "Compensation Committee Interlocks and Insider Participation", "Director Compensation" and "Compensation Committee Report," and is hereby incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Ownership of NVIDIA Securities

Information regarding ownership of NVIDIA securities required by this item will be contained in our 2023 Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management," and is hereby incorporated by reference.

Equity Compensation Plan Information

Information regarding our equity compensation plans required by this item will be contained in our 2023 Proxy Statement under the caption "Equity Compensation Plan Information," and is hereby incorporated by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information regarding related transactions and director independence required by this item will be contained in our 2023 Proxy Statement under the captions "Review of Transactions with Related Persons" and "Information About the Board of Directors and Corporate Governance - Independence of the Members of the Board of Directors," and is hereby incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding accounting fees and services required by this item will be contained in our 2023 Proxy Statement under the caption "Fees Billed by the Independent Registered Public Accounting Firm," and is hereby incorporated by reference.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

	Page
(a) 1. Financial Statements	
<u>Report of Independent Registered Public Accounting Firm (PCAOB ID: 238)</u>	<u>52</u>
<u>Consolidated Statements of Income for the years ended January 29, 2023, January 30, 2022, and January 31, 2021</u>	<u>54</u>
<u>Consolidated Statements of Comprehensive Income for the years ended January 29, 2023, January 30, 2022, and January 31, 2021</u>	<u>55</u>
<u>Consolidated Balance Sheets as of January 29, 2023 and January 30, 2022</u>	<u>56</u>
<u>Consolidated Statements of Shareholders' Equity for the years ended January 29, 2023, January 30, 2022, and January 31, 2021</u>	<u>57</u>
<u>Consolidated Statements of Cash Flows for the years ended January 29, 2023, January 30, 2022, and January 31, 2021</u>	<u>58</u>
<u>Notes to the Consolidated Financial Statements</u>	<u>59</u>
2. Financial Statement Schedule	
<u>Schedule II Valuation and Qualifying Accounts for the years ended January 29, 2023, January 30, 2022, and January 31, 2021</u>	<u>87</u>
3. Exhibits	
<u>The exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as a part of this Annual Report on Form 10-K.</u>	<u>88</u>

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of NVIDIA Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of NVIDIA Corporation and its subsidiaries (the "Company") as of January 29, 2023 and January 30, 2022, and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended January 29, 2023, including the related notes and financial statement schedule listed in the index appearing under Item 15(a) (2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of January 29, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of January 29, 2023 and January 30, 2022, and the results of its operations and its cash flows for each of the three years in the period ended January 29, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 29, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

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 Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and

directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Inventories - Provisions for Excess or Obsolete Inventories and Excess Product Purchase Commitments

As described in Notes 1, 10 and 13 to the consolidated financial statements, the Company charges cost of sales for inventory provisions to write-down inventory for excess or obsolete inventory and for excess product purchase commitments. Most of the Company's inventory provisions relate to excess quantities of products, based on the Company's inventory levels and future product purchase commitments compared to assumptions about future demand and market conditions. As of January 29, 2023, the Company's consolidated inventories balance was \$5,159 million and the Company's consolidated outstanding inventory purchase and long-term supply obligations balance was \$4,920 million, of which a significant portion relates to inventory purchase obligations.

The principal considerations for our determination that performing procedures relating to the valuation of inventories, specifically the provisions for excess or obsolete inventories and excess product purchase commitments, is a critical audit matter are the significant judgment by management when developing provisions for excess or obsolete inventories and excess product purchase commitments, including developing assumptions related to future demand and market conditions. This in turn led to significant auditor judgment, subjectivity, and effort in performing procedures and evaluating management's assumptions related to future demand and market conditions.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's provisions for excess or obsolete inventories and excess product purchase commitments, including controls over management's assumptions related to future demand and market conditions. These procedures also included, among others, testing management's process for developing the provisions for excess or obsolete inventories and excess product purchase commitments; evaluating the appropriateness of management's approach; testing the completeness and accuracy of underlying data used in the approach; and evaluating the reasonableness of management's assumptions related to future demand and market conditions. Evaluating management's assumptions related to future demand and market conditions involved evaluating whether the assumptions used by management were reasonable considering (i) current and past results, including historical product life cycle, (ii) the consistency with external market and industry data, and (iii) changes in technology.

/s/ PricewaterhouseCoopers LLP
San Jose, California
February 24, 2023

We have served as the Company's auditor since 2004.

NVIDIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(In millions, except per share data)

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
Revenue	\$ 26,974	\$ 26,914	\$ 16,675
Cost of revenue	11,618	9,439	6,279
Gross profit	15,356	17,475	10,396
Operating expenses			
Research and development	7,339	5,268	3,924
Sales, general and administrative	2,440	2,166	1,940
Acquisition termination cost	1,353	—	—
Total operating expenses	11,132	7,434	5,864
Income from operations	4,224	10,041	4,532
Interest income	267	29	57
Interest expense	(262)	(236)	(184)
Other, net	(48)	107	4
Other income (expense), net	(43)	(100)	(123)
Income before income tax	4,181	9,941	4,409
Income tax expense (benefit)	(187)	189	77
Net income	\$ 4,368	\$ 9,752	\$ 4,332
Net income per share:			
Basic	\$ 1.76	\$ 3.91	\$ 1.76
Diluted	\$ 1.74	\$ 3.85	\$ 1.73
Weighted average shares used in per share computation:			
Basic	2,487	2,496	2,467
Diluted	2,507	2,535	2,510

See accompanying notes to the consolidated financial statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In millions)

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
Net income	\$ 4,368	\$ 9,752	\$ 4,332
Other comprehensive income (loss), net of tax			
Available-for-sale debt securities:			
Net unrealized gain (loss)	(31)	(16)	2
Reclassification adjustments for net realized gain (loss) included in net income	1	—	(2)
Net change in unrealized loss	(30)	(16)	—
Cash flow hedges:			
Net unrealized gain (loss)	47	(43)	9
Reclassification adjustments for net realized gain (loss) included in net income	(49)	29	9
Net change in unrealized gain (loss)	(2)	(14)	18
Other comprehensive income (loss), net of tax	(32)	(30)	18
Total comprehensive income	\$ 4,336	\$ 9,722	\$ 4,350

See accompanying notes to the consolidated financial statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In millions, except par value)

	January 29, 2023	January 30, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,389	\$ 1,990
Marketable securities	9,907	19,218
Accounts receivable, net	3,827	4,650
Inventories	5,159	2,605
Prepaid expenses and other current assets	791	366
Total current assets	23,073	28,829
Property and equipment, net	3,807	2,778
Operating lease assets	1,038	829
Goodwill	4,372	4,349
Intangible assets, net	1,676	2,339
Deferred income tax assets	3,396	1,222
Other assets	3,820	3,841
Total assets	<u>\$ 41,182</u>	<u>\$ 44,187</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,193	\$ 1,783
Accrued and other current liabilities	4,120	2,552
Short-term debt	1,250	—
Total current liabilities	6,563	4,335
Long-term debt	9,703	10,946
Long-term operating lease liabilities	902	741
Other long-term liabilities	1,913	1,553
Total liabilities	19,081	17,575
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock, \$0.001 par value; 2 shares authorized; none issued	—	—
Common stock, \$0.001 par value; 8,000 shares authorized; 2,466 shares issued and outstanding as of January 29, 2023; 2,506 shares issued and outstanding as of January 30, 2022	2	3
Additional paid-in capital	11,971	10,385
Accumulated other comprehensive loss	(43)	(11)
Retained earnings	10,171	16,235
Total shareholders' equity	22,101	26,612
Total liabilities and shareholders' equity	<u>\$ 41,182</u>	<u>\$ 44,187</u>

See accompanying notes to the consolidated financial statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In millions, except per share data)	Common Stock Outstanding		Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	Shares	Amount					
Balances, January 26, 2020	2,450	\$ 3	\$ 7,043	\$ (9,814)	\$ 1	\$ 14,971	\$ 12,204
Net income	—	—	—	—	—	4,332	4,332
Other comprehensive income	—	—	—	—	18	—	18
Issuance of common stock from stock plans	40	—	194	—	—	—	194
Tax withholding related to vesting of restricted stock units	(11)	—	—	(942)	—	—	(942)
Cash dividends declared and paid (\$0.16 per common share)	—	—	—	—	—	(395)	(395)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	86	—	—	—	86
Stock-based compensation	—	—	1,396	—	—	—	1,396
Balances, January 31, 2021	2,479	3	8,719	(10,756)	19	18,908	16,893
Net income	—	—	—	—	—	9,752	9,752
Other comprehensive loss	—	—	—	—	(30)	—	(30)
Issuance of common stock from stock plans	35	—	281	—	—	—	281
Tax withholding related to vesting of restricted stock units	(8)	—	(614)	(1,290)	—	—	(1,904)
Cash dividends declared and paid (\$0.16 per common share)	—	—	—	—	—	(399)	(399)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	18	—	—	—	18
Stock-based compensation	—	—	2,001	—	—	—	2,001
Retirement of Treasury Stock	—	—	(20)	12,046	—	(12,026)	—
Balances, January 30, 2022	2,506	3	10,385	—	(11)	16,235	26,612
Net income	—	—	—	—	—	4,368	4,368
Other comprehensive loss	—	—	—	—	(32)	—	(32)
Issuance of common stock from stock plans	31	—	355	—	—	—	355
Tax withholding related to vesting of restricted stock units	(8)	—	(1,475)	—	—	—	(1,475)
Shares repurchased	(63)	(1)	(4)	—	—	(10,034)	(10,039)
Cash dividends declared and paid (\$0.16 per common share)	—	—	—	—	—	(398)	(398)
Stock-based compensation	—	—	2,710	—	—	—	2,710
Balances, January 29, 2023	2,466	\$ 2	\$ 11,971	\$ —	\$ (43)	\$ 10,171	\$ 22,101

See accompanying notes to the consolidated financial statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
Cash flows from operating activities:			
Net income	\$ 4,368	\$ 9,752	\$ 4,332
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock-based compensation expense	2,709	2,004	1,397
Depreciation and amortization	1,544	1,174	1,098
Acquisition termination cost	1,353	—	—
Losses (gains) on investments in non-affiliates, net	45	(100)	—
Deferred income taxes	(2,164)	(406)	(282)
Other	(7)	47	(20)
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable	822	(2,215)	(550)
Inventories	(2,554)	(774)	(524)
Prepaid expenses and other assets	(1,517)	(1,715)	(394)
Accounts payable	(551)	568	312
Accrued and other current liabilities	1,341	581	290
Other long-term liabilities	252	192	163
Net cash provided by operating activities	5,641	9,108	5,822
Cash flows from investing activities:			
Proceeds from maturities of marketable securities	19,425	15,197	8,792
Proceeds from sales of marketable securities	1,806	1,023	527
Purchases of marketable securities	(11,897)	(24,787)	(19,308)
Purchases related to property and equipment and intangible assets	(1,833)	(976)	(1,128)
Acquisitions, net of cash acquired	(49)	(263)	(8,524)
Investments and other, net	(77)	(24)	(34)
Net cash provided by (used in) investing activities	7,375	(9,830)	(19,675)
Cash flows from financing activities:			
Proceeds related to employee stock plans	355	281	194
Payments related to repurchases of common stock	(10,039)	—	—
Payments related to tax on restricted stock units	(1,475)	(1,904)	(942)
Dividends paid	(398)	(399)	(395)
Principal payments on property and equipment	(58)	(83)	(17)
Issuance of debt, net of issuance costs	—	4,977	4,968
Repayment of debt	—	(1,000)	—
Other	(2)	(7)	(4)
Net cash provided by (used in) financing activities	(11,617)	1,865	3,804
Change in cash and cash equivalents	1,399	1,143	(10,049)
Cash and cash equivalents at beginning of period	1,990	847	10,896
Cash and cash equivalents at end of period	\$ 3,389	\$ 1,990	\$ 847
Supplemental disclosures of cash flow information:			
Cash paid for income taxes, net	\$ 1,404	\$ 396	\$ 249
Cash paid for interest	\$ 254	\$ 246	\$ 138

See accompanying notes to the consolidated financial statements.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1 - Organization and Summary of Significant Accounting Policies

Our Company

Headquartered in Santa Clara, California, NVIDIA was incorporated in California in April 1993 and reincorporated in Delaware in April 1998.

All references to “NVIDIA,” “we,” “us,” “our” or the “Company” mean NVIDIA Corporation and its subsidiaries.

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal years 2023 and 2022 were both 52-week years. Fiscal year 2021 was a 53-week year.

Reclassifications

Certain prior fiscal year balances have been reclassified to conform to the current fiscal year presentation.

Prior period intangible asset gross carrying amount and accumulated amortization in Note 7 have been adjusted to write off immaterial fully amortized intangible assets as of January 30, 2022.

Principles of Consolidation

Our consolidated financial statements include the accounts of NVIDIA Corporation and our wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from our estimates. On an on-going basis, we evaluate our estimates, including those related to revenue recognition, cash equivalents and marketable securities, accounts receivable, inventories, income taxes, goodwill, stock-based compensation, litigation, investigation and settlement costs, restructuring and other charges, and other contingencies. The inputs into our judgments and estimates consider the economic implications of COVID-19. These estimates are based on historical facts and various other assumptions that we believe are reasonable.

In February 2023, we completed an assessment of the useful lives of our property, plant, and equipment. Based on advances in technology and usage rate, we increased the estimated useful life of a majority of the server, storage, and network equipment from three to a range of four to five years, and assembly and test equipment from five to seven years. This change in accounting estimate became effective at the beginning of fiscal year 2024. Based on the carrying amounts of a majority of our server, storage, network, and assembly and test equipment, net in use as of the end of fiscal year 2023, it is estimated this change will increase our fiscal year 2024 operating income by \$133 million as a result of the reduction in depreciation expense.

Revenue Recognition

We derive our revenue from product sales, including hardware and systems, license and development arrangements, software licensing, and cloud services. We determine revenue recognition through the following steps: (1) identification of the contract with a customer; (2) identification of the performance obligations in the contract; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contract (where revenue is allocated on a relative standalone selling price basis by maximizing the use of observable inputs to determine the standalone selling price for each performance obligation); and (5) recognition of revenue when, or as, we satisfy a performance obligation.

Product Sales Revenue

Revenue from product sales is recognized upon transfer of control of products to customers in an amount that reflects the consideration we expect to receive in exchange for those products. Certain products are

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

sold with support or an extended warranty for the incorporated system, hardware, and/or software. Support and extended warranty revenue are recognized ratably over the service period, or as services are performed. Revenue is recognized net of allowances for returns, customer programs and any taxes collected from customers.

For products sold with a right of return, we record a reduction to revenue by establishing a sales return allowance for estimated product returns at the time revenue is recognized, based primarily on historical return rates. However, if product returns for a fiscal period are anticipated to exceed historical return rates, we may determine that additional sales return allowances are required to properly reflect our estimated exposure for product returns.

Our customer programs involve rebates, which are designed to serve as sales incentives to resellers of our products in various target markets, and marketing development funds, or MDFs, which represent monies paid to our partners that are earmarked for market segment development and are designed to support our partners' activities while also promoting NVIDIA products. We account for customer programs as a reduction to revenue and accrue for potential rebates and MDFs based on the amount we expect to be claimed by customers.

License and Development Arrangements

Our license and development arrangements with customers typically require significant customization of our IP components. As a result, we recognize the revenue from the license and the revenue from the development services as a single performance obligation over the period in which the development services are performed. We measure progress to completion based on actual cost incurred to date as a percentage of the estimated total cost required to complete each project. If a loss on an arrangement becomes probable during a period, we record a provision for such loss in that period.

Software Licensing

Our software licenses provide our customers with a right to use the software when it is made available to the customer. Customers may purchase either perpetual licenses or subscriptions to licenses, which differ mainly in the duration over which the customer benefits from the software. Software licenses are frequently sold along with the right to receive, on a when-and-if available basis, future unspecified software updates and upgrades. Revenue from software licenses is recognized up front when the software is made available to the customer. Software support revenue is recognized ratably over the service period, or as services are performed.

Cloud Services

Cloud services, which allow customers to use hosted software and hardware infrastructure without taking possession of the software or hardware, are provided on a subscription basis or a combination of subscription plus usage. Revenue related to subscription-based cloud services is recognized ratably over the contract period. Revenue related to cloud services based on usage is recognized as usage occurs.

Product Warranties

We generally offer a limited warranty to end-users that ranges from one to three years for products in order to repair or replace products for any manufacturing defects or hardware component failures. Cost of revenue includes the estimated cost of product warranties that are calculated at the point of revenue recognition. Under limited circumstances, we may offer an extended limited warranty to customers for certain products. We also accrue for known warranty and indemnification issues if a loss is probable and can be reasonably estimated.

Stock-based Compensation

We use the closing trading price of our common stock on the date of grant, minus a dividend yield discount, as the fair value of awards of restricted stock units, or RSUs, and performance stock units that are based on our corporate financial performance targets, or PSUs. We use a Monte Carlo simulation on the date of grant to estimate the fair value of performance stock units that are based on market conditions, or market-based PSUs. The compensation expense for RSUs and market-based PSUs is recognized using a straight-line

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

attribution method over the requisite employee service period while compensation expense for PSUs is recognized using an accelerated amortization model. We estimate the fair value of shares to be issued under our employee stock purchase plan, or ESPP, using the Black-Scholes model at the commencement of an offering period in March and September of each year. Stock-based compensation for our ESPP is expensed using an accelerated amortization model. Additionally, we estimate forfeitures at least annually based on historical experience and revise the estimates of forfeiture in subsequent periods if actual forfeitures differ from those estimates.

Litigation, Investigation and Settlement Costs

We currently, are, and will likely continue to be subject to claims, litigation, and other actions, including potential regulatory proceedings, involving patent and other intellectual property matters, taxes, labor and employment, competition and antitrust, commercial disputes, goods and services offered by us and by third parties, and other matters. There are many uncertainties associated with any litigation or investigation, and we cannot be certain that these actions or other third-party claims against us will be resolved without litigation, fines and/or substantial settlement payments or judgments. If information becomes available that causes us to determine that a loss in any of our pending litigation, investigations or settlements is probable, and we can reasonably estimate the loss associated with such events, we will record the loss in accordance with U.S. GAAP. However, the actual liability in any such litigation or investigation may be materially different from our estimates, which could require us to record additional costs.

Foreign Currency Remeasurement

We use the United States dollar as our functional currency for our subsidiaries. Foreign currency monetary assets and liabilities are remeasured into United States dollars at end-of-period exchange rates. Non-monetary assets and liabilities such as property and equipment and equity are remeasured at historical exchange rates. Revenue and expenses are remeasured at exchange rates in effect during each period, except for those expenses related to non-monetary balance sheet amounts, which are remeasured at historical exchange rates. Gains or losses from foreign currency remeasurement are included in earnings in our Consolidated Statements of Income and to date have not been significant.

Income Taxes

We recognize federal, state and foreign current tax liabilities or assets based on our estimate of taxes payable or refundable in the current fiscal year by tax jurisdiction. We recognize federal, state and foreign deferred tax assets or liabilities, as appropriate, for our estimate of future tax effects attributable to temporary differences and carryforwards; and we record a valuation allowance to reduce any deferred tax assets by the amount of any tax benefits that, based on available evidence and judgment, are not expected to be realized.

Our calculation of deferred tax assets and liabilities is based on certain estimates and judgments and involves dealing with uncertainties in the application of complex tax laws. Our estimates of deferred tax assets and liabilities may change based, in part, on added certainty or finality to an anticipated outcome, changes in accounting standards or tax laws in the United States, or foreign jurisdictions where we operate, or changes in other facts or circumstances. In addition, we recognize liabilities for potential United States and foreign income tax contingencies based on our estimate of whether, and the extent to which, additional taxes may be due. If we determine that payment of these amounts is unnecessary or if the recorded tax liability is less than our current assessment, we may be required to recognize an income tax benefit or additional income tax expense in our financial statements accordingly.

As of January 29, 2023, we had a valuation allowance of \$ 1.48 billion related to capital loss carryforwards, state, and certain other deferred tax assets that management determined are not likely to be realized due to jurisdictional projections of future taxable income, including capital gains, tax attributes usage limitation by certain jurisdictions, and potential utilization limitations of tax attributes acquired as a result of stock ownership changes. To the extent realization of the deferred tax assets becomes more-likely-than-not, we would recognize such deferred tax assets as an income tax benefit during the period.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

We recognize the benefit from a tax position only if it is more-likely-than-not that the position would be sustained upon audit based solely on the technical merits of the tax position. Our policy is to include interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Net Income Per Share

Basic net income per share is computed using the weighted average number of common shares outstanding during the period. Diluted net income per share is computed using the weighted average number of common and potentially dilutive shares outstanding during the period, using the treasury stock method. Under the treasury stock method, the effect of equity awards outstanding is not included in the computation of diluted net income per share for periods when their effect is anti-dilutive.

Cash and Cash Equivalents and Marketable Securities

We consider all highly liquid investments that are readily convertible into cash and have an original maturity of three months or less at the time of purchase to be cash equivalents. Marketable securities consist of highly liquid debt investments with maturities of greater than three months when purchased. We currently classify our investments as current based on the nature of the investments and their availability for use in current operations.

We classify our cash equivalents and marketable securities related to debt securities at the date of acquisition as available-for-sale. These available-for-sale debt securities are reported at fair value with the related unrealized gains and losses included in accumulated other comprehensive income or loss, a component of shareholders' equity, net of tax. The fair value of interest-bearing debt securities includes accrued interest. Realized gains and losses on the sale of marketable securities are determined using the specific-identification method and recorded in the other income (expense), net, section of our Consolidated Statements of Income.

Available-for-sale debt investments are subject to a periodic impairment review. If the estimated fair value of available-for-sale debt securities is less than its amortized cost basis, we determine if the difference, if any, is caused by expected credit losses and write-down the amortized cost basis of the securities if it is more likely than not we will be required or we intend to sell the securities before recovery of its amortized cost basis. Allowances for credit losses and write-downs are recognized in the other income (expense), net section of our Consolidated Statements of Income.

Fair Value of Financial Instruments

The carrying value of cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to their relatively short maturities as of January 29, 2023 and January 30, 2022. Marketable securities are comprised of available-for-sale securities that are reported at fair value with the related unrealized gains or losses included in accumulated other comprehensive income or loss, a component of shareholders' equity, net of tax. Fair value of the marketable securities is determined based on quoted market prices. Derivative instruments are recognized as either assets or liabilities and are measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. For derivative instruments designated as fair value hedges, the gains or losses are recognized in earnings in the periods of change together with the offsetting losses or gains on the hedged items attributed to the risk being hedged. For derivative instruments designated as cash-flow hedges, the effective portion of the gains or losses on the derivatives is initially reported as a component of other comprehensive income or loss and is subsequently recognized in earnings when the hedged exposure is recognized in earnings. For derivative instruments not designated for hedge accounting, changes in fair value are recognized in earnings.

Concentration of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents, marketable securities, and accounts receivable. Our investment policy requires the purchase of highly-rated fixed income securities, the diversification of investment type and credit exposures, and includes certain limits on our portfolio duration. We perform ongoing credit evaluations of our customers' financial condition and maintain an allowance for potential credit losses. This allowance consists of an amount

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

identified for specific customers and an amount based on overall estimated exposure. Our overall estimated exposure excludes amounts covered by credit insurance and letters of credit.

Inventories

Inventory cost is computed on an adjusted standard basis, which approximates actual cost on an average or first-in, first-out basis. Inventory costs consist primarily of the cost of semiconductors, including wafer fabrication, assembly, testing and packaging, manufacturing support costs, including labor and overhead associated with such purchases, final test yield fallout, and shipping costs, as well as the cost of purchased memory products and other component parts. We charge cost of sales for inventory provisions to write-down our inventory to the lower of cost or net realizable value or for obsolete or excess inventory, and for excess product purchase commitments. Most of our inventory provisions relate to excess quantities of products, based on our inventory levels and future product purchase commitments compared to assumptions about future demand and market conditions. Once inventory has been written-off or written-down, it creates a new cost basis for the inventory that is not subsequently written-up. We record a liability for noncancelable purchase commitments with suppliers for quantities in excess of our future demand forecasts consistent with our valuation of obsolete or excess inventory.

Property and Equipment

Property and equipment are stated at cost. Depreciation of property and equipment is computed using the straight-line method based on the estimated useful lives of the assets, generally three to five years. Once an asset is identified for retirement or disposition, the related cost and accumulated depreciation or amortization are removed, and a gain or loss is recorded. The estimated useful lives of our buildings are up to thirty years. Depreciation expense includes the amortization of assets recorded under finance leases. Leasehold improvements and assets recorded under finance leases are amortized over the shorter of the expected lease term or the estimated useful life of the asset.

Leases

We determine if an arrangement is or contains a lease at inception. Operating leases with lease terms of more than 12 months are included in operating lease assets, accrued and other current liabilities, and long-term operating lease liabilities on our consolidated balance sheet. Operating lease assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments over the lease term.

Operating lease assets and liabilities are recognized based on the present value of the remaining lease payments discounted using our incremental borrowing rate. Operating lease assets also include initial direct costs incurred and prepaid lease payments, minus any lease incentives. Our lease terms include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense is recognized on a straight-line basis over the lease term.

We combine the lease and non-lease components in determining the operating lease assets and liabilities.

Goodwill

Goodwill is subject to our annual impairment test during the fourth quarter of our fiscal year, or earlier if indicators of potential impairment exist. For the purposes of completing our impairment test, we perform either a qualitative or a quantitative analysis on a reporting unit basis.

Qualitative factors include industry and market considerations, overall financial performance, and other relevant events and factors affecting the reporting units.

The quantitative impairment test considers both the income approach and the market approach to estimate a reporting unit's fair value. The income and market valuation approaches consider factors that include, but are not limited to, prospective financial information, growth rates, residual values, discount rates and comparable multiples from publicly traded companies in our industry and require us to make certain assumptions and estimates regarding industry economic factors and the future profitability of our business.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Intangible Assets and Other Long-Lived Assets

Intangible assets primarily represent acquired intangible assets including developed technology, in-process research and development, or IPR&D, and customer relationships, as well as rights acquired under technology licenses, patents, and acquired IP. We currently amortize our intangible assets with finite lives over periods ranging from one to twenty years using a method that reflects the pattern in which the economic benefits of the intangible asset are consumed or otherwise used up or, if that pattern cannot be reliably determined, using a straight-line amortization method. We initially capitalize the fair value of IPR&D as an intangible asset with an indefinite life. When IPR&D projects are completed, we reclassify the IPR&D as an amortizable purchased intangible asset and amortize over the asset's estimated useful life.

Long-lived assets, such as property and equipment and intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability of assets or asset groups to be held and used is measured by a comparison of the carrying amount of an asset or asset group to estimated undiscounted future cash flows expected to be generated by the asset or asset group. If the carrying amount of an asset or asset group exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset or asset group exceeds the estimated fair value of the asset or asset group. Fair value is determined based on the estimated discounted future cash flows expected to be generated by the asset or asset group. Assets and liabilities to be disposed of would be separately presented in the Consolidated Balance Sheet and the assets would be reported at the lower of the carrying amount or fair value less costs to sell, and would no longer be depreciated.

Business Combination

We allocate the fair value of the purchase price of an acquisition to the tangible assets acquired, liabilities assumed, and intangible assets acquired, including IPR&D, based on their estimated fair values. The excess of the fair value of the purchase price over the fair values of these net tangible and intangible assets acquired is recorded as goodwill. Management's estimates of fair value are based upon assumptions believed to be reasonable, but our estimates and assumptions are inherently uncertain and subject to refinement. The estimates and assumptions used in valuing intangible assets include, but are not limited to, the amount and timing of projected future cash flows, discount rate used to determine the present value of these cash flows and asset lives. These estimates are inherently uncertain and, therefore, actual results may differ from the estimates made. As a result, during the measurement period of up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair value of the purchase price of an acquisition, whichever comes first, any subsequent adjustments are recorded to our Consolidated Statements of Income.

Acquisition-related expenses are recognized separately from the business combination and expensed as incurred.

Investment in Non-Affiliated Entities

Non-marketable equity investments in privately-held companies are recorded at fair value on a non-recurring basis only if an impairment or observable price adjustment occurs in the period with changes in fair value recorded through net income. These investments are valued using observable and unobservable inputs or data in an inactive market and the valuation requires our judgment due to the absence of market prices and inherent lack of liquidity. The estimated fair value is based on quantitative and qualitative factors including subsequent financing activities by the investee.

Marketable equity investments in publicly-held companies are recorded at fair value with the related unrealized and realized gains and losses recognized in other income (expense), net.

Note 2 - Business Combination

Termination of the Arm Share Purchase Agreement

In February 2022, NVIDIA and SoftBank announced the termination of the Share Purchase Agreement whereby NVIDIA would have acquired Arm from SoftBank. The parties agreed to terminate due to significant

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

regulatory challenges preventing the completion of the transaction. We recorded an acquisition termination cost of \$ 1.35 billion in fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

Acquisition of Mellanox Technologies, Ltd.

In April 2020, we completed the acquisition of all outstanding shares of Mellanox for a total purchase consideration of \$ 7.13 billion.

Purchase Price Allocation

The aggregate purchase consideration has been allocated as follows (in millions):

Purchase Price	
Cash paid for outstanding Mellanox ordinary shares (1)	\$ 7,033
Cash for Mellanox equity awards (2)	16
Total cash consideration	7,049
Fair value of Mellanox equity awards assumed by NVIDIA (3)	85
Total purchase consideration	\$ 7,134
Allocation	
Cash and cash equivalents	\$ 115
Marketable securities	699
Accounts receivable, net	216
Inventories	320
Prepaid expenses and other assets	179
Property and equipment, net	144
Goodwill	3,431
Intangible assets	2,970
Accounts payable	(136)
Accrued and other current liabilities	(236)
Income tax liability	(191)
Deferred income tax liability	(258)
Other long-term liabilities	(119)
	\$ 7,134

(1) Represents the cash consideration of \$125.00 per share paid to Mellanox shareholders for approximately 56 million shares of outstanding Mellanox ordinary shares.

(2) Represents the cash consideration for the settlement of approximately 249 thousand Mellanox stock options held by employees and non-employee directors of Mellanox.

(3) Represents the fair value of Mellanox's stock-based compensation awards attributable to pre-combination services.

We allocated the purchase price to tangible and identified intangible assets acquired and liabilities assumed based on the estimated fair values.

The goodwill is primarily attributable to the planned growth in the combined business of NVIDIA and Mellanox. Goodwill is not amortized to earnings, but instead is reviewed for impairment at least annually, absent any interim indicators of impairment. Goodwill recognized in the acquisition is not expected to be deductible for foreign tax purposes. Goodwill arising from the Mellanox acquisition has been allocated to the Compute and Networking segment. Refer to Note 17 – Segment Information for further details on segments.

The operating results of Mellanox have been included in our consolidated financial statements for fiscal year 2021 since the acquisition date of April 27, 2020. Revenue attributable to Mellanox was approximately 10% for fiscal year 2021. There is not a practical way to determine net income attributable to Mellanox due to

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

integration. Acquisition-related costs attributable to Mellanox of \$28 million were included in selling, general and administrative expense for fiscal year 2021.

Intangible Assets

The estimated fair value and useful life of the acquired intangible assets at the time of the acquisition are as follows:

	Fair Value	Useful Lives
	<i>(In millions)</i>	
Developed technology (1)	\$ 1,640	5 years
Customer relationships (2)	440	3 years
Order backlog (3)	190	Based on actual shipments
Trade names (4)	70	5 years
Total identified finite-lived intangible assets	2,340	
IPR&D (5)	630	N/A
Total identified intangible assets	\$ 2,970	

(1) The fair value of developed technology was identified using the Multi-Period Excess Earnings Method.

(2) Customer relationships represent the fair value of the existing relationships using the With and Without Method.

(3) Order backlog represents primarily the fair value of purchase arrangements with customers using the Multi-Period Excess Earnings Method. The intangible asset was fully amortized as of January 31, 2021.

(4) Trade names primarily relate to Mellanox trade names and fair value was determined by applying the Relief-from-Royalty Method under the income approach.

(5) The fair value of IPR&D was determined using the Multi-Period Excess Earnings Method.

The fair value of the finite-lived intangible assets will be amortized over the estimated useful lives based on the pattern in which the economic benefits are expected to be received to cost of revenue and operating expenses.

Mellanox had an IPR&D project associated with the next generation interconnect product that had not yet reached technological feasibility as of the acquisition date. Accordingly, we recorded an indefinite-lived intangible asset of \$630 million for the fair value of this project, which was initially not amortized. In fiscal year 2023, we commenced amortization of the IPR&D intangible asset.

Supplemental Unaudited Pro Forma Information

The following unaudited pro forma financial information summarizes the combined results of operations for NVIDIA and Mellanox as if the companies were combined as of the beginning of fiscal year 2020:

	Pro Forma
	Year Ended
	January 31, 2021
	<i>(In millions)</i>
Revenue	\$ 17,104
Net income	\$ 4,757

The unaudited pro forma information presented above includes adjustments related to amortization of acquired intangible assets, adjustments to stock-based compensation expense, fair value of acquired inventory, and transaction costs. The unaudited pro forma information is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisition actually occurred at the beginning of fiscal year 2020 or of the results of our future operations of the combined businesses.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

The pro forma results for fiscal year 2021 excluded the inventory step-up expense of \$ 161 million. There were no other material nonrecurring adjustments.

Note 3 - Leases

Our lease obligations primarily consist of operating leases for our headquarters complex, domestic and international office facilities, and data center space, with lease periods expiring between fiscal years 2024 and 2035.

Future minimum lease payments under our non-cancelable operating leases as of January 29, 2023, are as follows:

	Operating Lease Obligations
	<i>(In millions)</i>
Fiscal Year:	
2024	\$ 220
2025	198
2026	180
2027	166
2028	144
2029 and thereafter	323
Total	1,231
Less imputed interest	153
Present value of net future minimum lease payments	1,078
Less short-term operating lease liabilities	176
Long-term operating lease liabilities	\$ 902

In addition to above, we have operating leases, primarily for our data centers, that are expected to commence within fiscal years 2024 and 2025 with lease terms of 2 to 8 years for \$463 million.

Operating lease expense for fiscal years 2023, 2022, and 2021 was \$ 193 million, \$168 million, \$145 million, respectively. Short-term and variable lease expenses for fiscal years 2023, 2022, and 2021 were not significant.

Other information related to leases was as follows:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	<i>(In millions)</i>		
Supplemental cash flows information			
Operating cash flows used for operating leases	\$ 184	\$ 154	\$ 141
Operating lease assets obtained in exchange for lease obligations	\$ 358	\$ 266	\$ 200

As of January 29, 2023, our operating leases had a weighted average remaining lease term of 6.8 years and a weighted average discount rate of 3.21%. As of January 30, 2022, our operating leases had a weighted average remaining lease term of 7.1 years and a weighted average discount rate of 2.51%.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Note 4 - Stock-Based Compensation

Our stock-based compensation expense is associated with restricted stock units, or RSUs, performance stock units that are based on our corporate financial performance targets, or PSUs, performance stock units that are based on market conditions, or market-based PSUs, and our ESPP.

Our Consolidated Statements of Income include stock-based compensation expense, net of amounts allocated to inventory, as follows:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	<i>(In millions)</i>		
Cost of revenue	\$ 138	\$ 141	\$ 88
Research and development	1,892	1,298	860
Sales, general and administrative	680	565	449
Total	<u>\$ 2,710</u>	<u>\$ 2,004</u>	<u>\$ 1,397</u>

Stock-based compensation capitalized in inventories was not significant during fiscal years 2023, 2022, and 2021.

The following is a summary of equity awards granted under our equity incentive plans:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	<i>(In millions, except per share data)</i>		
RSUs, PSUs and Market-based PSUs			
Awards granted	25	18	36
Estimated total grant-date fair value	\$ 4,505	\$ 3,492	\$ 2,764
Weighted average grant-date fair value per share	\$ 183.72	\$ 190.69	\$ 76.81

ESPP

Shares purchased	3	5	4
Weighted average price per share	\$ 122.54	\$ 56.36	\$ 34.80
Weighted average grant-date fair value per share	\$ 51.87	\$ 23.24	\$ 16.91

As of January 29, 2023, there was \$6.56 billion of aggregate unearned stock-based compensation expense. This amount is expected to be recognized over a weighted average period of 2.6 years for RSUs, PSUs, and market-based PSUs, and 1.0 year for ESPP.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

The fair value of shares issued under our ESPP have been estimated with the following assumptions:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
<i>(Using the Black-Scholes model)</i>			
ESPP			
Weighted average expected life (in years)	0.1-2.0	0.1-2.0	0.1-2.0
Risk-free interest rate	—%-4.6%	—%-0.5%	0.1%-1.6%
Volatility	43%-72%	20%-58%	26%-89%
Dividend yield	0.1%	0.1%	0.1%-0.3%

For ESPP shares, the expected term represents the average term from the first day of the offering period to the purchase date. The risk-free interest rate assumption used to value ESPP shares is based upon observed interest rates on Treasury bills appropriate for the expected term. Our expected stock price volatility assumption for ESPP is estimated using historical volatility. For awards granted, we use the dividend yield at grant date. Our RSU, PSU, and market-based PSU awards are not eligible for cash dividends prior to vesting; therefore, the fair values of RSUs, PSUs, and market-based PSUs are discounted for the dividend yield.

Additionally, for RSU, PSU, and market-based PSU awards, we estimate forfeitures semi-annually and revise the estimates of forfeiture in subsequent periods if actual forfeitures differ from those estimates. Forfeitures are estimated based on historical experience.

Equity Incentive Program

We grant or have granted stock options, RSUs, PSUs, market-based PSUs, and stock purchase rights under the following equity incentive plans. In addition, in connection with our acquisitions of various companies, we have assumed certain stock-based awards granted under their stock incentive plans and converted them into our RSUs.

Amended and Restated 2007 Equity Incentive Plan

In 2007, our shareholders approved the NVIDIA Corporation 2007 Equity Incentive Plan, as most recently amended and restated, or the 2007 Plan.

The 2007 Plan authorizes the issuance of incentive stock options, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance stock awards, performance cash awards, and other stock-based awards to employees, directors and consultants. Only our employees may receive incentive stock options. As of January 29, 2023, up to 47 million shares of our common stock could be issued pursuant to stock awards granted under the 2007 Plan, of which 2 million shares were issuable upon the exercise of outstanding stock options. All options are fully vested, the last of which will expire by December 2023 if not exercised. Currently, we grant RSUs, PSUs and market-based PSUs under the 2007 Plan, under which, as of January 29, 2023, there were 160 million shares available for future grants.

Subject to certain exceptions, RSUs granted to employees vest (A) over a four-year period, subject to continued service, with 25% vesting on a pre-determined date that is close to the anniversary of the date of grant and 6.25% vesting quarterly thereafter, (B) over a three-year period, subject to continued service, with 40% vesting on a pre-determined date that is close to the anniversary of the date of grant and 7.5% vesting quarterly thereafter, or (C) over a four-year period, subject to continued service, with 6.25% vesting quarterly. PSUs vest over a four-year period, subject to continued service, with 25% vesting on a pre-determined date that is close to the anniversary of the date of grant and 6.25% vesting quarterly thereafter. Market-based PSUs vest 100% on approximately the three-year anniversary of the date of grant. However, the number of shares subject to both PSUs and market-based PSUs that are eligible to vest is generally determined by the Compensation Committee based on achievement of pre-determined criteria.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Amended and Restated 2012 Employee Stock Purchase Plan

In 2012, our shareholders approved the NVIDIA Corporation 2012 Employee Stock Purchase Plan, as most recently amended and restated, or the 2012 Plan.

Employees who participate in the 2012 Plan may have up to 15% of their earnings withheld to purchase shares of common stock. The Board may decrease this percentage at its discretion. Each offering period is approximately 24 months, which is generally divided into four purchase periods of six months. The price of common stock purchased under our 2012 Plan will be equal to 85% of the lower of the fair market value of the common stock on the commencement date of each offering period or the fair market value of the common stock on each purchase date within the offering. As of January 29, 2023, we had 230 million shares reserved for future issuance under the 2012 Plan.

Equity Award Activity

The following is a summary of our equity award transactions under our equity incentive plans:

	RSUs, PSUs and Market-based PSUs Outstanding	
	Number of Shares	Weighted Average Grant-Date Fair Value
	<i>(In millions, except per share data)</i>	
Balances, January 30, 2022	46	\$ 114.19
Granted	25	\$ 183.72
Vested restricted stock	(24)	\$ 100.06
Canceled and forfeited	(2)	\$ 141.17
Balances, January 29, 2023	45	\$ 158.45
Vested and expected to vest after January 29, 2023	45	\$ 158.35

As of January 29, 2023 and January 30, 2022, there were 160 million and 131 million shares, respectively, of common stock available for future grants under our equity incentive plans.

As of January 29, 2023, the total intrinsic value of options currently exercisable and outstanding was \$ 410 million, with an average exercise price of \$3.79 per share and an average remaining term of 0.5 years. The total intrinsic value of options exercised was \$ 642 million, \$741 million, and \$521 million for fiscal years 2023, 2022, and 2021, respectively. Upon the exercise of an option, we issue a new share of stock.

The total fair value of RSUs and PSUs, as of their respective vesting dates, during the years ended January 29, 2023, January 30, 2022, and January 31, 2021, was \$4.27 billion, \$5.56 billion, and \$2.67 billion, respectively.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Note 5 - Net Income Per Share

The following is a reconciliation of the denominator of the basic and diluted net income per share computations for the periods presented:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	<i>(In millions, except per share data)</i>		
Numerator:			
Net income	\$ 4,368	\$ 9,752	\$ 4,332
Denominator:			
Basic weighted average shares	2,487	2,496	2,467
Dilutive impact of outstanding equity awards	20	39	43
Diluted weighted average shares	2,507	2,535	2,510
Net income per share:			
Basic (1)	\$ 1.76	\$ 3.91	\$ 1.76
Diluted (2)	\$ 1.74	\$ 3.85	\$ 1.73
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	40	21	12

(1) Calculated as net income divided by basic weighted average shares.

(2) Calculated as net income divided by diluted weighted average shares.

Note 6 - Goodwill

As of January 29, 2023, the total carrying amount of goodwill was \$ 4.37 billion, consisting of goodwill balances allocated to our Compute & Networking and Graphics reporting units of \$4.00 billion and \$370 million, respectively. As of January 30, 2022, the total carrying amount of goodwill was \$4.35 billion, consisting of goodwill balances allocated to our Compute & Networking and Graphics reporting units of \$ 3.99 billion and \$361 million, respectively. Goodwill increased by \$23 million in fiscal year 2023 from acquisitions. We assigned \$ 14 million of the increase in goodwill to our Compute & Networking segment and assigned \$9 million of the increase to our Graphics segment. During the fourth quarters of fiscal years 2023, 2022, and 2021, we completed our annual qualitative impairment tests and concluded that goodwill was not impaired in any of these years.

Note 7 - Amortizable Intangible Assets

The components of our amortizable intangible assets are as follows:

	January 29, 2023			January 30, 2022		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	<i>(In millions)</i>					
Acquisition-related intangible assets (1)	\$ 3,093	\$ (1,614)	\$ 1,479	\$ 3,061	\$ (947)	\$ 2,114
Patents and licensed technology	446	(249)	197	446	(221)	225
Total intangible assets	\$ 3,539	\$ (1,863)	\$ 1,676	\$ 3,507	\$ (1,168)	\$ 2,339

(1) During the first quarter of fiscal year 2023, we commenced amortization of a \$630 million in-process research and development intangible asset related to our acquisition of Mellanox.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Amortization expense associated with intangible assets for fiscal years 2023, 2022, and 2021 was \$ 699 million, \$563 million, and \$612 million, respectively. Future amortization expense related to the net carrying amount of intangible assets as of January 29, 2023 is estimated to be \$602 million in fiscal year 2024, \$541 million in fiscal year 2025, \$ 247 million in fiscal year 2026, \$ 142 million in fiscal year 2027, \$ 35 million in fiscal year 2028, and \$109 million in fiscal year 2029 and thereafter.

Note 8 - Cash Equivalents and Marketable Securities

Our cash equivalents and marketable securities related to debt securities are classified as “available-for-sale” debt securities.

The following is a summary of cash equivalents and marketable securities as of January 29, 2023 and January 30, 2022:

January 29, 2023						
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Reported as	
					Cash Equivalents	Marketable Securities
<i>(In millions)</i>						
Corporate debt securities	\$ 4,809	\$ —	\$ (12)	\$ 4,797	\$ 1,087	\$ 3,710
Debt securities issued by the United States Treasury	4,185	1	(44)	4,142	—	4,142
Debt securities issued by United States government agencies	1,836	—	(2)	1,834	50	1,784
Money market funds	1,777	—	—	1,777	1,777	—
Certificates of deposit	365	—	—	365	134	231
Foreign government bonds	140	—	—	140	100	40
Total	\$ 13,112	\$ 1	\$ (58)	\$ 13,055	\$ 3,148	\$ 9,907

January 30, 2022						
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Reported as	
					Cash Equivalents	Marketable Securities
<i>(In millions)</i>						
Corporate debt securities	\$ 9,977	\$ —	\$ (3)	\$ 9,974	\$ 1,102	\$ 8,872
Debt securities issued by the United States Treasury	7,314	—	(14)	7,300	—	7,300
Debt securities issued by United States government agencies	1,612	—	—	1,612	256	1,356
Certificates of deposit	1,561	—	—	1,561	21	1,540
Money market funds	316	—	—	316	316	—
Foreign government bonds	150	—	—	150	—	150
Total	\$ 20,930	\$ —	\$ (17)	\$ 20,913	\$ 1,695	\$ 19,218

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

The following tables provide the breakdown of unrealized losses as of January 29, 2023 and January 30, 2022, aggregated by investment category and length of time that individual securities have been in a continuous loss position:

	January 29, 2023					
	Less than 12 Months		12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Loss	Estimated Fair Value	Gross Unrealized Loss	Estimated Fair Value	Gross Unrealized Loss
(In millions)						
Debt securities issued by the United States Treasury	\$ 2,444	\$ (21)	\$ 1,172	\$ (23)	\$ 3,616	\$ (44)
Corporate debt securities	1,188	(7)	696	(5)	1,884	(12)
Debt securities issued by United States government agencies	1,307	(2)	—	—	1,307	(2)
Total	\$ 4,939	\$ (30)	\$ 1,868	\$ (28)	\$ 6,807	\$ (58)

	January 30, 2022					
	Less than 12 Months		12 Months or Greater		Total	
	Estimated Fair Value	Gross Unrealized Loss	Estimated Fair Value	Gross Unrealized Loss	Estimated Fair Value	Gross Unrealized Loss
(In millions)						
Debt securities issued by the United States Treasury	\$ 5,292	\$ (14)	\$ —	\$ —	\$ 5,292	\$ (14)
Corporate debt securities	2,445	(3)	19	—	2,464	(3)
Total	\$ 7,737	\$ (17)	\$ 19	\$ —	\$ 7,756	\$ (17)

The gross unrealized losses are related to fixed income securities, driven primarily by changes in interest rates. Net realized gains and losses were not significant for all periods presented.

The amortized cost and estimated fair value of cash equivalents and marketable securities as of January 29, 2023 and January 30, 2022 are shown below by contractual maturity.

	January 29, 2023		January 30, 2022	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
(In millions)				
Less than one year	\$ 9,738	\$ 9,708	\$ 16,346	\$ 16,343
Due in 1 - 5 years	3,374	3,347	4,584	4,570
Total	\$ 13,112	\$ 13,055	\$ 20,930	\$ 20,913

Note 9 - Fair Value of Financial Assets and Liabilities

The fair values of our financial assets and liabilities are determined using quoted market prices of identical assets or quoted market prices of similar assets from active markets. We review fair value hierarchy classification on a quarterly basis.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Pricing Category	Fair Value at			
	January 29, 2023		January 30, 2022	
	(In millions)			
Level 1	\$	1,777	\$	316
Level 2	\$	4,797	\$	9,974
Level 2	\$	4,142	\$	7,300
Level 2	\$	1,834	\$	1,612
Level 2	\$	365	\$	1,561
Level 2	\$	140	\$	150
Level 1	\$	11	\$	58
Level 3	\$	288	\$	208
Level 2	\$	1,230	\$	1,236
Level 2	\$	1,185	\$	1,224
Level 2	\$	966	\$	1,055
Level 2	\$	1,099	\$	1,200
Level 2	\$	1,364	\$	1,542
Level 2	\$	1,044	\$	1,200
Level 2	\$	870	\$	1,066
Level 2	\$	1,637	\$	2,147
Level 2	\$	410	\$	551

(1) Unrealized losses of \$61 million from investments in publicly-traded equity securities were recorded in other income (expense), net, in fiscal year 2023. Unrealized gains of \$48 million from an investment in a publicly-traded equity security were recorded in other income (expense), net, in fiscal year 2022.

(2) These liabilities are carried on our Consolidated Balance Sheets at their original issuance value, net of unamortized debt discount and issuance costs.

Note 10 - Balance Sheet Components

Certain balance sheet components are as follows:

	January 29, 2023	January 30, 2022
(In millions)		
Inventories (1):		
Raw materials	\$ 2,430	\$ 791
Work in-process	466	692
Finished goods	2,263	1,122
Total inventories	\$ 5,159	\$ 2,605

(1) In fiscal years 2023 and 2022, we recorded an inventory reserve expense of approximately \$1.04 billion and \$173 million in cost of revenue, respectively.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

	January 29, 2023	January 30, 2022	Estimated Useful Life
	<i>(In millions)</i>		<i>(In years)</i>
Property and Equipment:			
Land	\$ 218	\$ 218	(A)
Buildings, leasehold improvements, and furniture	1,598	874	(B)
Equipment, compute hardware, and software	4,303	2,852	3-5
Construction in process	382	737	(C)
Total property and equipment, gross	6,501	4,681	
Accumulated depreciation and amortization	(2,694)	(1,903)	
Total property and equipment, net	\$ 3,807	\$ 2,778	

(A) Land is a non-depreciable asset.

(B) The estimated useful lives of our buildings are up to thirty years. Leasehold improvements and finance leases are amortized based on the lesser of either the asset's estimated useful life or the expected lease term.

(C) Construction in process represents assets that are not available for their intended use as of the balance sheet date.

Depreciation expense for fiscal years 2023, 2022, and 2021 was \$ 844 million, \$611 million, and \$486 million, respectively.

Accumulated amortization of leasehold improvements and finance leases was \$ 327 million and \$265 million as of January 29, 2023 and January 30, 2022, respectively.

Property, equipment and intangible assets acquired by assuming related liabilities during fiscal years 2023, 2022, and 2021 were \$ 374 million, \$258 million, and \$157 million, respectively.

	January 29, 2023	January 30, 2022
Other assets:	<i>(In millions)</i>	
Prepaid supply agreements	\$ 2,989	\$ 1,747
Prepaid royalties	387	409
Investment in non-affiliated entities	299	266
Advanced consideration for acquisition (1)	—	1,353
Other	145	66
Total other assets	\$ 3,820	\$ 3,841

(1) Refer to Note 2 - Business Combination for further details on the Arm acquisition.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

	January 29, 2023	January 30, 2022
	(In millions)	
Accrued and Other Current Liabilities:		
Customer program accruals	\$ 1,196	\$ 1,000
Excess inventory purchase obligations (1)	954	196
Accrued payroll and related expenses	530	409
Taxes payable	467	132
Deferred revenue (2)	354	300
Operating leases	176	144
Other	443	371
Total accrued and other current liabilities	<u>\$ 4,120</u>	<u>\$ 2,552</u>

(1) In fiscal years 2023 and 2022, we recorded an expense of approximately \$1.13 billion and \$181 million, respectively, in cost of revenue for inventory purchase obligations in excess of our current demand projections, and cancellation and underutilization penalties.

(2) Deferred revenue primarily includes customer advances and deferrals related to license and development arrangements, support for hardware and software, and cloud services.

	January 29, 2023	January 30, 2022
	(In millions)	
Other Long-Term Liabilities:		
Income tax payable (1)	\$ 1,204	\$ 980
Deferred income tax	247	245
Deferred revenue (2)	218	202
Licenses payable	181	77
Other	63	49
Total other long-term liabilities	<u>\$ 1,913</u>	<u>\$ 1,553</u>

(1) Income tax payable is comprised of the long-term portion of the one-time transition tax payable, unrecognized tax benefits, and related interest and penalties.

(2) Deferred revenue primarily includes deferrals related to support for hardware and software.

Deferred Revenue

The following table shows the changes in deferred revenue during fiscal years 2023 and 2022.

	January 29, 2023	January 30, 2022
	(In millions)	
Balance at beginning of period	\$ 502	\$ 451
Deferred revenue added during the period	830	821
Addition due to business combinations	—	8
Revenue recognized during the period	(760)	(778)
Balance at end of period	<u>\$ 572</u>	<u>\$ 502</u>

Revenue related to remaining performance obligations represents the contracted license and development arrangements and support for hardware and software. This includes deferred revenue currently recorded and amounts that will be invoiced in future periods. As of January 29, 2023, \$652 million of revenue related to

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

performance obligations had not been recognized, of which we expect to recognize approximately 47% over the next twelve months and the remainder thereafter. This excludes revenue related to performance obligations for contracts with a length of one year or less.

Note 11 - Derivative Financial Instruments

We enter into foreign currency forward contracts to mitigate the impact of foreign currency exchange rate movements on our operating expenses. These contracts are designated as cash flow hedges for hedge accounting treatment. Gains or losses on the contracts are recorded in accumulated other comprehensive income or loss and reclassified to operating expense when the related operating expenses are recognized in earnings or ineffectiveness should occur. The fair value of the contracts was not significant as of January 29, 2023 and January 30, 2022.

We enter into foreign currency forward contracts to mitigate the impact of foreign currency movements on monetary assets and liabilities that are denominated in currencies other than U.S. dollar. These forward contracts were not designated for hedge accounting treatment. Therefore, the change in fair value of these contracts is recorded in other income or expense and offsets the change in fair value of the hedged foreign currency denominated monetary assets and liabilities, which is also recorded in other income or expense.

The table below presents the notional value of our foreign currency forward contracts outstanding as of January 29, 2023 and January 30, 2022:

	January 29, 2023	January 30, 2022
	<i>(In millions)</i>	
Designated as cash flow hedges	\$ 1,128	\$ 1,023
Non-designated hedges	\$ 366	\$ 408

As of January 29, 2023, all designated foreign currency forward contracts mature within eighteen months. The expected realized gains and losses deferred into accumulated other comprehensive income (loss) related to foreign currency forward contracts within the next twelve months was not significant.

During fiscal years 2023 and 2022, the impact of derivative financial instruments designated for hedge accounting treatment on other comprehensive income or loss was not significant and all such instruments were determined to be highly effective.

Note 12 - Debt

Long-Term Debt

In June 2021, March 2020, and September 2016, we issued a total of \$ 5.00 billion, \$5.00 billion, and \$2.00 billion aggregate principal of senior notes, respectively. The net proceeds from these offerings were \$4.98 billion, \$4.97 billion, and \$1.98 billion, respectively, after deducting debt discount and issuance costs.

In fiscal year 2022, we repaid the \$ 1.00 billion of 2.20% Notes Due 2021.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

The carrying value of the Notes, the calendar year of maturity, and the associated interest rates were as follows:

	Expected Remaining Term (years)	Effective Interest Rate	January 29, 2023	January 30, 2022
<i>(In millions)</i>				
0.309% Notes Due 2023	0.4	0.41%	\$ 1,250	\$ 1,250
0.584% Notes Due 2024	1.4	0.66%	1,250	1,250
3.20% Notes Due 2026	3.6	3.31%	1,000	1,000
1.55% Notes Due 2028	5.4	1.64%	1,250	1,250
2.85% Notes Due 2030	7.2	2.93%	1,500	1,500
2.00% Notes Due 2031	8.4	2.09%	1,250	1,250
3.50% Notes Due 2040	17.2	3.54%	1,000	1,000
3.50% Notes Due 2050	27.2	3.54%	2,000	2,000
3.70% Notes Due 2060	37.2	3.73%	500	500
Unamortized debt discount and issuance costs			(47)	(54)
Net carrying amount			10,953	10,946
Less short-term portion			(1,250)	—
Total long-term portion			<u>\$ 9,703</u>	<u>\$ 10,946</u>

All our notes are unsecured senior obligations. All existing and future liabilities of our subsidiaries will be effectively senior to the notes. Our notes pay interest semi-annually. We may redeem each of our notes prior to maturity, subject to a make-whole premium as defined in the applicable form of note.

As of January 29, 2023, we were in compliance with the required covenants, which are non-financial in nature, under the Notes.

Commercial Paper

We have a \$575 million commercial paper program to support general corporate purposes. As of January 29, 2023, we had not issued any commercial paper.

Note 13 - Commitments and Contingencies

Purchase Obligations

Our purchase obligations reflect our commitments to purchase components used to manufacture our products, including long-term supply agreements, certain software and technology licenses, other goods and services and long-lived assets.

We have entered into several long-term supply agreements, under which we have made advance payments and have \$ 810 million remaining unpaid. As of January 29, 2023, we had outstanding inventory purchase and long-term supply obligations totaling \$4.92 billion, inclusive of the \$810 million. Under our manufacturing relationships with our foundry suppliers, subcontractors and contract manufacturers, cancellation of outstanding purchase commitments is generally allowed but may result in the payment of costs incurred through the date of cancellation. Other non-inventory purchase obligations of \$3.14 billion include \$2.23 billion of multi-year cloud service agreements.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Total future purchase commitments as of January 29, 2023, are as follows:

	Commitments
	<i>(In millions)</i>
Fiscal Year:	
2024	\$ 5,230
2025	983
2026	679
2027	622
2028	296
2029 and thereafter	253
Total	<u>\$ 8,063</u>

Accrual for Product Warranty Liabilities

The estimated amount of product warranty liabilities was \$82 million and \$46 million as of January 29, 2023 and January 30, 2022, respectively. The estimated product returns and estimated product warranty activity consisted of the following:

	January 29,	Year Ended	January 30,	January 31,
	2023	January 30,	2022	2021
		2022		
		<i>(In millions)</i>		
Balance at beginning of period	\$ 46	\$ 22	\$ 15	
Additions	145	40	28	
Utilization	(109)	(16)	(21)	
Balance at end of period	<u>\$ 82</u>	<u>\$ 46</u>	<u>\$ 22</u>	

In the second quarter of fiscal year 2023, we recorded \$122 million in product warranty liabilities primarily related to a defect identified in a third-party component embedded in certain Data Center products. In the third quarter of fiscal year 2023, we recognized a warranty-related benefit of approximately \$70 million in cost of revenue due to favorable product recovery.

In connection with certain agreements that we have entered in the past, we have provided indemnities for matters such as tax, product, and employee liabilities. We have included intellectual property indemnification provisions in our technology-related agreements with third parties. Maximum potential future payments cannot be estimated because many of these agreements do not have a maximum stated liability. We have not recorded any liability in our Consolidated Financial Statements for such indemnifications.

Litigation

Securities Class Action and Derivative Lawsuits

The plaintiffs in the putative securities class action lawsuit, captioned 4:18-cv-07669-HSG, initially filed on December 21, 2018 in the United States District Court for the Northern District of California, and titled In Re NVIDIA Corporation Securities Litigation, filed an amended complaint on May 13, 2020. The amended complaint asserted that NVIDIA and certain NVIDIA executives violated Section 10(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and SEC Rule 10b-5, by making materially false or misleading statements related to channel inventory and the impact of cryptocurrency mining on GPU demand between May 10, 2017 and November 14, 2018. Plaintiffs also alleged that the NVIDIA executives who they named as defendants violated Section 20(a) of the Exchange Act. Plaintiffs sought class certification, an award of unspecified compensatory damages, an award of reasonable costs and expenses,

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

including attorneys' fees and expert fees, and further relief as the Court may deem just and proper. On March 2, 2021, the district court granted NVIDIA's motion to dismiss the complaint without leave to amend, entered judgment in favor of NVIDIA and closed the case. On March 30, 2021, plaintiffs filed an appeal from judgment in the United States Court of Appeals for the Ninth Circuit, case number 21-15604. Oral argument on the appeal was held on May 10, 2022.

The putative derivative lawsuit pending in the United States District Court for the Northern District of California, captioned 4:19-cv-00341-HSG, initially filed January 18, 2019 and titled In re NVIDIA Corporation Consolidated Derivative Litigation, was stayed pending resolution of the plaintiffs' appeal in the In Re NVIDIA Corporation Securities Litigation action. On February 22, 2022, the court administratively closed the case, but stated that it would reopen the case once the appeal in the In Re NVIDIA Corporation Securities Litigation action is resolved. The lawsuit asserts claims, purportedly on behalf of us, against certain officers and directors of the Company for breach of fiduciary duty, unjust enrichment, waste of corporate assets, and violations of Sections 14(a), 10(b), and 20(a) of the Exchange Act based on the dissemination of allegedly false and misleading statements related to channel inventory and the impact of cryptocurrency mining on GPU demand. The plaintiffs are seeking unspecified damages and other relief, including reforms and improvements to NVIDIA's corporate governance and internal procedures.

The putative derivative actions initially filed September 24, 2019 and pending in the United States District Court for the District of Delaware, Lipchitz v. Huang, et al. (Case No. 1:19-cv-01795-UNA) and Nelson v. Huang, et. al. (Case No. 1:19-cv-01798- UNA), remain stayed pending resolution of the plaintiffs' appeal in the In Re NVIDIA Corporation Securities Litigation action. The lawsuits assert claims, purportedly on behalf of us, against certain officers and directors of the Company for breach of fiduciary duty, unjust enrichment, insider trading, misappropriation of information, corporate waste and violations of Sections 14(a), 10(b), and 20(a) of the Exchange Act based on the dissemination of allegedly false, and misleading statements related to channel inventory and the impact of cryptocurrency mining on GPU demand. The plaintiffs seek unspecified damages and other relief, including disgorgement of profits from the sale of NVIDIA stock and unspecified corporate governance measures.

Accounting for Loss Contingencies

As of January 29, 2023, we have not recorded any accrual for contingent liabilities associated with the legal proceedings described above based on our belief that liabilities, while possible, are not probable. Further, except as specifically described above, any possible loss or range of loss in these matters cannot be reasonably estimated at this time. We are engaged in legal actions not described above arising in the ordinary course of business and, while there can be no assurance of favorable outcomes, we believe that the ultimate outcome of these actions will not have a material adverse effect on our operating results, liquidity or financial position.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Note 14 - Income Taxes

The income tax expense (benefit) applicable to income before income taxes consists of the following:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	(In millions)		
Current income taxes:			
Federal	\$ 1,703	\$ 482	\$ 197
State	46	42	1
Foreign	228	71	161
Total current	1,977	595	359
Deferred taxes:			
Federal	(2,165)	(420)	(246)
Foreign	1	14	(36)
Total deferred	(2,164)	(406)	(282)
Income tax expense (benefit)	\$ (187)	\$ 189	\$ 77

Income before income tax consists of the following:

	Year Ended		
	January 29, 2023	January 30, 2022	January 31, 2021
	(In millions)		
U.S.	\$ 3,477	\$ 8,446	\$ 1,437
Foreign	704	1,495	2,972
Income before income tax	\$ 4,181	\$ 9,941	\$ 4,409

The income tax expense (benefit) differs from the amount computed by applying the U.S. federal statutory rate of 21% to income before income taxes as follows:

	Year Ended			
	January 29, 2023		January 30, 2022	January 31, 2021
	(In millions, except percentages)			
Tax expense computed at federal statutory rate	\$ 878	21.0 %	\$ 2,088	21.0 %
Expense (benefit) resulting from:				
Acquisition termination cost	261	6.2 %	—	— %
State income taxes, net of federal tax effect	50	1.2 %	42	0.4 %
Foreign-derived intangible income	(739)	(17.7)%	(520)	(5.2)%
Stock-based compensation	(309)	(7.4)%	(337)	(3.4)%
U.S. federal research and development tax credit	(278)	(6.6)%	(289)	(2.9)%
Foreign tax rate differential	(83)	(2.0)%	(497)	(5.0)%
IP domestication	—	— %	(244)	(2.5)%
Other	33	0.8 %	(54)	(0.5)%
Income tax expense (benefit)	\$ (187)	(4.5)%	\$ 189	1.9 %

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

The tax effect of temporary differences that gives rise to significant portions of the deferred tax assets and liabilities are presented below:

	January 29, 2023	January 30, 2022
	(In millions)	
Deferred tax assets:		
Capitalized research and development expenditure (1)	\$ 1,859	\$ 508
Research and other tax credit carryforwards	951	798
GILTI deferred tax assets	800	378
Accruals and reserves, not currently deductible for tax purposes	686	258
Net operating loss and capital loss carryforwards	409	118
Operating lease liabilities	193	125
Stock-based compensation	99	86
Property, equipment and intangible assets	66	22
Other deferred tax assets	91	22
Gross deferred tax assets	5,154	2,315
Less valuation allowance	(1,484)	(907)
Total deferred tax assets	3,670	1,408
Deferred tax liabilities:		
Unremitted earnings of foreign subsidiaries	(228)	(150)
Operating lease assets	(179)	(113)
Acquired intangibles	(115)	(169)
Gross deferred tax liabilities	(522)	(432)
Net deferred tax asset (2)	\$ 3,148	\$ 976

(1) Capitalized research and development deferred tax assets were previously included in Property, equipment and intangible assets.

(2) Net deferred tax asset includes long-term deferred tax assets of \$3.40 billion and \$1.22 billion and long-term deferred tax liabilities of \$247 million and \$245 million for fiscal years 2023 and 2022, respectively. Long-term deferred tax liabilities are included in other long-term liabilities on our Consolidated Balance Sheets.

As of January 29, 2023, we intend to indefinitely reinvest approximately \$ 1.05 billion and \$245 million of cumulative undistributed earnings held by certain subsidiaries in Israel and the United Kingdom, respectively. We have not provided the amount of unrecognized deferred tax liabilities for temporary differences related to these investments as the determination of such amount is not practicable.

As of January 29, 2023 and January 30, 2022, we had a valuation allowance of \$ 1.48 billion and \$907 million, respectively, related to capital loss carryforwards, state, and certain other deferred tax assets that management determined not likely to be realized due, in part, to jurisdictional projections of future taxable income, including capital gains. To the extent realization of the deferred tax assets becomes more-likely-than-not, we would recognize such deferred tax assets as income tax benefits during the period.

As of January 29, 2023, we had U.S. federal, state and foreign net operating loss carryforwards of \$ 363 million, \$329 million and \$329 million, respectively. The federal and state carryforwards will begin to expire in fiscal years 2026 and 2024, respectively. The foreign net operating loss carryforwards of \$329 million may be carried forward indefinitely. As of January 29, 2023, we had federal research tax credit carryforwards of \$ 26 million, before the impact of uncertain tax positions, that will begin to expire in fiscal year 2024. We have state research tax credit carryforwards of \$1.49 billion, before the impact of uncertain tax positions. \$1.41 billion is attributable to the State of California and may be carried over indefinitely and \$ 83 million is attributable to various other states and will begin to expire in fiscal year 2024. As of January 29, 2023, we had federal capital loss carryforwards of \$1.38 billion that will begin to expire in fiscal year 2024.

Our tax attributes remain subject to audit and may be adjusted for changes or modification in tax laws, other authoritative interpretations thereof, or other facts and circumstances. Utilization of tax attributes may also

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

be subject to limitations due to ownership changes and other limitations provided by the Internal Revenue Code and similar state and foreign tax provisions. If any such limitations apply, the tax attributes may expire or be denied before utilization.

A reconciliation of gross unrecognized tax benefits is as follows:

	January 29, 2023	January 30, 2022	January 31, 2021
	<i>(In millions)</i>		
Balance at beginning of period	\$ 1,013	\$ 776	\$ 583
Increases in tax positions for current year	268	246	158
Increases in tax positions for prior years	1	14	60
Decreases in tax positions for prior years	(15)	(4)	(11)
Settlements	(9)	(8)	(5)
Lapse in statute of limitations	(20)	(11)	(9)
Balance at end of period	<u>\$ 1,238</u>	<u>\$ 1,013</u>	<u>\$ 776</u>

Included in the balance of unrecognized tax benefits as of January 29, 2023 are \$ 770 million of tax benefits that would affect our effective tax rate if recognized.

We classify an unrecognized tax benefit as a current liability, or amount refundable, to the extent that we anticipate payment or receipt of cash for income taxes within one year. The amount is classified as a long-term liability, or reduction of long-term amount refundable, if we anticipate payment or receipt of cash for income taxes during a period beyond a year.

We include interest and penalties related to unrecognized tax benefits as a component of income tax expense. We recognized net interest and penalties related to unrecognized tax benefits in income tax expense line of our consolidated statements of income of \$33 million, \$14 million, and \$7 million during fiscal years 2023, 2022 and 2021, respectively. As of January 29, 2023 and January 30, 2022, we have accrued \$95 million and \$59 million, respectively, for the payment of interest and penalties related to unrecognized tax benefits, which is not included as a component of our gross unrecognized tax benefits.

While we believe that we have adequately provided for all tax positions, amounts asserted by tax authorities could be greater or less than our accrued position. Accordingly, our provisions on federal, state and foreign tax-related matters to be recorded in the future may change as revised estimates are made or the underlying matters are settled or otherwise resolved. As of January 29, 2023, we have not identified any positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within the next twelve months.

We are subject to taxation by taxing authorities both in the United States and other countries. As of January 29, 2023, the significant tax jurisdictions that may be subject to examination include China, Germany, Hong Kong, India, Israel, Taiwan, United Kingdom, and the United States for fiscal years 2005 through 2022. As of January 29, 2023, the significant tax jurisdictions for which we are currently under examination include Germany, India, Israel, and the United States for fiscal years 2005 through 2022.

Note 15 - Shareholders' Equity

Capital Return Program

During fiscal year 2023, we repurchased 63 million shares for \$10.04 billion. Since the inception of our share repurchase program through January 29, 2023, we have repurchased an aggregate of 1.10 billion shares under our share repurchase program for a total cost of \$ 17.12 billion. As of January 29, 2023, we were authorized, subject to certain specifications, to repurchase an additional \$7.23 billion of shares through December 2023.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

During fiscal years 2023, 2022, and 2021, we paid \$ 398 million, \$399 million, and \$395 million in cash dividends to our shareholders, respectively. Our cash dividend program and the payment of future cash dividends under that program are subject to our Board of Directors' continuing determination that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

In fiscal year 2022, we retired our existing 349 million treasury shares. These shares assumed the status of authorized and unissued shares upon retirement. The excess of repurchase price over par value was allocated between additional paid-in capital and retained earnings, resulting in a reduction in additional paid-in capital by \$20 million and retained earnings by \$12.0 billion. Any future repurchased shares will assume the status of authorized and unissued shares.

Note 16 - Employee Retirement Plans

We provide tax-qualified defined contribution plans to eligible employees in the U.S. and certain other countries. Our contribution expense for fiscal years 2023, 2022, and 2021 was \$227 million, \$168 million, and \$120 million, respectively.

Note 17 - Segment Information

Our Chief Executive Officer, who is considered to be our chief operating decision maker, or CODM, reviews financial information presented on an operating segment basis for purposes of making decisions and assessing financial performance.

The Compute & Networking segment includes our Data Center accelerated computing platform; networking; automotive AI Cockpit, autonomous driving development agreements, and autonomous vehicle solutions; electric vehicle computing platforms; Jetson for robotics and other embedded platforms; and NVIDIA AI Enterprise and other software; and CMP.

The Graphics segment includes GeForce GPUs for gaming and PCs, the GeForce NOW game streaming service and related infrastructure, and solutions for gaming platforms; Quadro/NVIDIA RTX GPUs for enterprise workstation graphics; vGPU software for cloud-based visual and virtual computing; automotive platforms for infotainment systems; and Omniverse Enterprise software for building and operating metaverse and 3D internet applications.

Operating results by segment include costs or expenses that are directly attributable to each segment, and costs or expenses that are leveraged across our unified architecture and therefore allocated between our two segments.

The "All Other" category includes the expenses that our CODM does not assign to either Compute & Networking or Graphics for purposes of making operating decisions or assessing financial performance. The expenses include stock-based compensation expense, acquisition-related and other costs, corporate infrastructure and support costs, restructuring costs, acquisition termination cost, IP-related and legal settlement costs, contributions, and other non-recurring charges and benefits that our CODM deems to be enterprise in nature.

Our CODM does not review any information regarding total assets on a reportable segment basis. Depreciation and amortization expense directly attributable to each reportable segment is included in operating results for each segment. However, the CODM does not evaluate depreciation and amortization expense by operating segment and, therefore, it is not separately presented. There is no intersegment revenue. The accounting policies for segment reporting are the same as for our consolidated financial statements. The table below presents details of our reportable segments and the "All Other" category.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

	Compute & Networking	Graphics	All Other	Consolidated
	(In millions)			
Year Ended January 29, 2023:				
Revenue	\$ 15,068	\$ 11,906	\$ —	\$ 26,974
Operating income (loss)	\$ 5,083	\$ 4,552	\$ (5,411)	\$ 4,224
Year Ended January 30, 2022:				
Revenue	\$ 11,046	\$ 15,868	\$ —	\$ 26,914
Operating income (loss)	\$ 4,598	\$ 8,492	\$ (3,049)	\$ 10,041
Year Ended January 31, 2021:				
Revenue	\$ 6,841	\$ 9,834	\$ —	\$ 16,675
Operating income (loss)	\$ 2,548	\$ 4,612	\$ (2,628)	\$ 4,532

	January 29, 2023	January 30, 2022	January 31, 2021
	(In millions)		
Reconciling items included in "All Other" category:			
Stock-based compensation expense	\$ (2,710)	\$ (2,004)	\$ (1,397)
Acquisition termination cost	(1,353)	—	—
Acquisition-related and other costs	(674)	(636)	(836)
Unallocated cost of revenue and operating expenses	(595)	(399)	(357)
Restructuring costs and other	(54)	—	—
IP-related and legal settlement costs	(23)	(10)	(38)
Contributions	(2)	—	—
Total	\$ (5,411)	\$ (3,049)	\$ (2,628)

Revenue by geographic region is allocated to individual countries based on the billing location of the customer. End customer location may be different than our customer's billing location. The following table summarizes information pertaining to our revenue from customers based on the invoicing address by geographic regions:

	January 29, 2023	January 30, 2022	January 31, 2021
	(In millions)		
Revenue:			
United States	\$ 8,292	\$ 4,349	\$ 3,214
Taiwan	6,986	8,544	4,531
China (including Hong Kong)	5,785	7,111	3,886
Other countries	5,911	6,910	5,044
Total revenue	\$ 26,974	\$ 26,914	\$ 16,675

No customer represented 10% or more of total revenue for fiscal years 2023, 2022 and 2021.

NVIDIA CORPORATION AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Continued)

Two customers accounted for 14% and 11% of our accounts receivable balance as of January 29, 2023. Two customers each accounted for 11% of our accounts receivable balance as of January 30, 2022.

The following table summarizes information pertaining to our revenue by each of the specialized markets we serve:

		Year Ended	
	January 29, 2023	January 30, 2022	January 31, 2021
Revenue:		<i>(In millions)</i>	
Data Center	\$ 15,005	\$ 10,613	\$ 6,696
Gaming	9,067	12,462	7,759
Professional Visualization	1,544	2,111	1,053
Automotive	903	566	536
OEM & Other	455	1,162	631
Total revenue	<u>\$ 26,974</u>	<u>\$ 26,914</u>	<u>\$ 16,675</u>

The following table presents summarized information for long-lived assets by country. Long-lived assets consist of property and equipment and exclude other assets, operating lease assets, goodwill, and intangible assets.

	January 29, 2023	January 30, 2022
Long-lived assets:	<i>(In millions)</i>	
United States	\$ 2,587	\$ 2,023
Taiwan	702	379
Israel	283	185
Other countries	235	191
Total long-lived assets	<u>\$ 3,807</u>	<u>\$ 2,778</u>

NVIDIA CORPORATION AND SUBSIDIARIES
SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
<i>(In millions)</i>				
Fiscal year 2023				
Allowance for doubtful accounts	\$ 4	\$ — (1)	\$ — (1)	\$ 4
Sales return allowance	\$ 13	\$ 104 (2)	\$ (91) (4)	\$ 26
Deferred tax valuation allowance	\$ 907	\$ 577 (3)	\$ —	\$ 1,484
Fiscal year 2022				
Allowance for doubtful accounts	\$ 4	\$ — (1)	\$ — (1)	\$ 4
Sales return allowance	\$ 17	\$ 19 (2)	\$ (23) (4)	\$ 13
Deferred tax valuation allowance	\$ 728	\$ 179 (3)	\$ —	\$ 907
Fiscal year 2021				
Allowance for doubtful accounts	\$ 2	\$ 2 (1)	\$ — (1)	\$ 4
Sales return allowance	\$ 9	\$ 30 (2)	\$ (22) (4)	\$ 17
Deferred tax valuation allowance	\$ 621	\$ 107 (3)	\$ —	\$ 728

(1) Additions represent either expense or acquired balances and deductions represent write-offs.

(2) Additions represent estimated product returns charged as a reduction to revenue or an acquired balance.

(3) Additional valuation allowance on deferred tax assets not likely to be realized. Fiscal year 2023 includes additional valuation allowance on capital loss carryforwards, state, and certain other deferred tax assets. Refer to Note 14 of the Notes to the Consolidated Financial Statements in Part IV, Item 15 of this Annual Report on Form 10-K for additional information.

(4) Represents sales returns.

EXHIBIT INDEX

Exhibit No.	Exhibit Description	Incorporated by Reference			Filing Date
		Schedule/Form	File Number	Exhibit	
2.1	Agreement and Plan of Merger, dated March 10, 2019, by and among NVIDIA Corporation, NVIDIA International Holdings Inc., Mellanox Technologies Ltd. and Teal Barvaz Ltd.	8-K	0-23985	2.1	3/11/2019
2.2^	Share Purchase Agreement, dated September 13, 2020, by and among NVIDIA, NVIDIA Holdings, Arm, SoftBank, and Vision Fund	8-K	0-23985	2.1	9/14/2020
3.1	Restated Certificate of Incorporation	10-K	0-23985	3.1	3/18/2022
3.2	Amendment to Restated Certificate of Incorporation of NVIDIA Corporation	8-K	0-23985	3.1	6/6/2022
3.3	Bylaws of NVIDIA Corporation, Amended and Restated as of March 3, 2022	8-K	0-23985	3.1	3/9/2022
4.1	Reference is made to Exhibits 3.1, 3.2 and 3.3				
4.2	Specimen Stock Certificate	S-1/A	333-47495	4.2	4/24/1998
4.3	Indenture, dated as of September 16, 2016, by and between the Company and Computershare Trust Company, N.A., as successor to Wells Fargo Bank, National Association, as Trustee	8-K	0-23985	4.1	9/16/2016
4.4	Officers' Certificate, dated as of September 16, 2016	8-K	0-23985	4.2	9/16/2016
4.5	Form of 2026 Note	8-K	0-23985	Annex B-1 to Exhibit 4.2	9/16/2016
4.6*	Description of Securities				
4.7	Officers' Certificate, dated as of March 31, 2020	8-K	0-23985	4.2	3/31/2020
4.8	Form of 2030 Note	8-K	0-23985	Annex A-1 to Exhibit 4.2	3/31/2020
4.9	Form of 2040 Note	8-K	0-23985	Annex B-1 to Exhibit 4.2	3/31/2020
4.10	Form of 2050 Note	8-K	0-23985	Annex C-1 to Exhibit 4.2	3/31/2020
4.11	Form of 2060 Note	8-K	0-23985	Annex D-1 to Exhibit 4.2	3/31/2020
4.12	Officers' Certificate, dated as of June 16, 2021	8-K	0-23985	4.2	6/16/2021
4.13	Form of 2023 Note	8-K	0-23985	Annex A-1 to Exhibit 4.2	6/16/2021
4.14	Form of 2024 Note	8-K	0-23985	Annex B-1 to Exhibit 4.2	6/16/2021
4.15	Form of 2028 Note	8-K	0-23985	Annex C-1 to Exhibit 4.2	6/16/2021
4.16	Form of 2031 Note	8-K	0-23985	Annex D-1 to Exhibit 4.2	6/16/2021
10.1	Form of Indemnity Agreement between NVIDIA Corporation and each of its directors and officers	8-K	0-23985	10.1	3/7/2006
10.2+*	Amended and Restated 2007 Equity Incentive Plan				
10.3+	Amended and Restated 2007 Equity Incentive Plan - Non-Employee Director Stock Option Grant (2012 Annual Board Retainer)	10-Q	0-23985	10.4	5/23/2012
10.4+	Amended and Restated 2007 Equity Incentive Plan - Non Statutory Stock Option	10-Q	0-23985	10.1	8/22/2012
10.5+	Amended and Restated 2007 Equity Incentive Plan - Incentive Stock Option	10-Q	0-23985	10.2	8/22/2012

10.6+	Amended and Restated 2007 Equity Incentive Plan - Non-Employee Director Deferred Restricted Stock Unit Grant Notice and Deferred Restricted Stock Unit Agreement (2016)	10-K	0-23985	10.26	3/12/2015
10.7+	Amended and Restated 2007 Equity Incentive Plan - Non-Employee Director Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (2016)	10-K	0-23985	10.27	3/12/2015
10.8+	Amended and Restated 2007 Equity Incentive Plan - Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement & Performance-Based Restricted Stock Unit Grant Notice and Performance-Based Restricted Stock Unit Agreement (2018)	10-Q	0-23985	10.2	5/22/2018
10.9+	Amended and Restated 2007 Equity Incentive Plan - Global Restricted Stock Unit Grant Notice and Global Restricted Stock Unit Agreement (2019)	10-K	0-23985	10.19	2/21/2019
10.10+	Amended and Restated 2007 Equity Incentive Plan - Global Performance-Based Restricted Stock Unit Grant Notice and Performance-Based Restricted Stock Unit Agreement (2019)	8-K	0-23985	10.1	3/11/2019
10.11+	Amended and Restated 2007 Equity Incentive Plan – Global Restricted Stock Unit Grant Notice and Global Restricted Stock Unit Agreement (2020)	10-Q	0-23985	10.2	5/21/2020
10.12+	Amended and Restated 2007 Equity Incentive Plan – Global Restricted Stock Unit Grant Notice and Global Restricted Stock Unit Agreement (2021)	10-Q	0-23985	10.2	5/26/2021
10.13+	Amended and Restated 2007 Equity Incentive Plan – Global Restricted Stock Unit Grant Notice and Global Restricted Stock Unit Agreement (2022)	10-K	0-23985	10.16	3/18/2022
10.14+*	Amended and Restated 2007 Equity Incentive Plan – Global Restricted Stock Unit Grant Notice and Global Restricted Stock Unit Agreement (2023)				
10.15+	Amended and Restated 2012 Employee Stock Purchase Plan	10-Q	0-23985	10.2	8/20/2021
10.16+	Fiscal Year 2022 Variable Compensation Plan	8-K	0-23985	10.1	3/19/2021
10.17+	Fiscal Year 2023 Variable Compensation Plan	8-K	0-23985	10.1	3/9/2022
10.18+	Offer Letter between NVIDIA Corporation and Colette Kress, dated September 13, 2013	8-K	0-23985	10.1	9/16/2013
10.19+	Offer Letter between NVIDIA Corporation and Tim Teter, dated December 16, 2016	8-K	0-23985	10.1	1/19/2017
10.20+	Offer Letter between NVIDIA Corporation and Donald Robertson, dated May 21, 2019	8-K	0-23985	10.1	6/17/2019
10.21	Form of Commercial Paper Dealer Agreement between NVIDIA Corporation, as Issuer, and the Dealer party thereto	8-K	0-23985	10.1	12/15/2017
21.1*	List of Registrant's Subsidiaries				
23.1*	Consent of PricewaterhouseCoopers LLP				
24.1*	Power of Attorney (included in signature page)				
31.1*	Certification of Chief Executive Officer as required by Rule 13a-14(a) of the Securities Exchange Act of 1934				
31.2*	Certification of Chief Financial Officer as required by Rule 13a-14(a) of the Securities Exchange Act of 1934				
32.1#*	Certification of Chief Executive Officer as required by Rule 13a-14(b) of the Securities Exchange Act of 1934				

32.2#*	Certification of Chief Financial Officer as required by Rule 13a-14(b) of the Securities Exchange Act of 1934
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document

* Filed herewith.

+ Management contract or compensatory plan or arrangement.

In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release Nos. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed "filed" for purpose of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.

^ Certain exhibits and schedules have been omitted in accordance with Regulation S-K Item 601(a)(5).

Copies of above exhibits not contained herein are available to any shareholder upon written request to:
Investor Relations: NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, CA 95051

ITEM 16. FORM 10-K SUMMARY

Not Applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 24, 2023.

NVIDIA Corporation

By: /s/ Jen-Hsun Huang

Jen-Hsun Huang

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jen-Hsun Huang and Colette M. Kress, and each or any one of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-facts and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
<u>/s/ JEN-HSUN HUANG</u> Jen-Hsun Huang	President, Chief Executive Officer and Director (Principal Executive Officer)	February 24, 2023
<u>/s/ COLETTE M. KRESS</u> Colette M. Kress	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 24, 2023
<u>/s/ DONALD ROBERTSON</u> Donald Robertson	Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 24, 2023
<u>/s/ ROBERT BURGESS</u> Robert Burgess	Director	February 24, 2023
<u>/s/ TENCH COXE</u> Tench Coxe	Director	February 24, 2023
<u>/s/ JOHN O. DABIRI</u> John O. Dabiri	Director	February 24, 2023
<u>/s/ PERSIS DRELL</u> Persis Drell	Director	February 24, 2023
<u>/s/ DAWN HUDSON</u> Dawn Hudson	Director	February 24, 2023
<u>/s/ HARVEY C. JONES</u> Harvey C. Jones	Director	February 24, 2023
<u>/s/ MICHAEL MCCAFFERY</u> Michael McCaffery	Director	February 24, 2023
<u>/s/ STEPHEN C. NEAL</u> Stephen C. Neal	Director	February 24, 2023
<u>/s/ MARK L. PERRY</u> Mark L. Perry	Director	February 24, 2023
<u>/s/ A. BROOKE SEAWELL</u> A. Brooke Seawell	Director	February 24, 2023
<u>/s/ AARTI SHAH</u> Aarti Shah	Director	February 24, 2023
<u>/s/ MARK STEVENS</u> Mark Stevens	Director	February 24, 2023