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

FORM 10-Q

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

For the quarterly period ended October 30, 2022

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	**94-3177549**
(State or Other Jurisdiction of Incorporation or Organization)	**(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)

N/A
(Former name, former address and former fiscal year if changed since last report)

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

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 definitions of “large accelerated filer”, “accelerated filer”, “smaller reporting company”, and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

The number of shares of common stock, $0.001 par value, outstanding as of November 11, 2022, was 2.46 billion.

NVIDIA CORPORATION
FORM 10-Q
FOR THE QUARTER ENDED October 30, 2022

TABLE OF CONTENTS

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 Company 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 Quarterly Report on Form 10-Q. These channels may be updated from time to time on NVIDIA's investor relations website.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

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

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
Revenue	$ 5,931	$ 7,103	$ 20,923	$ 19,271
Cost of revenue	2,754	2,472	9,400	6,795
Gross profit	3,177	4,631	11,523	12,476
Operating expenses				
Research and development	1,945	1,403	5,387	3,802
Sales, general and administrative	631	557	1,815	1,603
Acquisition termination cost	—	—	1,353	—
Total operating expenses	2,576	1,960	8,555	5,405
Income from operations	601	2,671	2,968	7,071
Interest income	88	7	152	20
Interest expense	(65)	(62)	(198)	(175)
Other, net	(11)	22	(29)	160
Other income (expense), net	12	(33)	(75)	5
Income before income tax	613	2,638	2,893	7,076
Income tax expense (benefit)	(67)	174	(61)	327
Net income	$ 680	$ 2,464	$ 2,954	$ 6,749
Net income per share:				
Basic	$ 0.27	$ 0.99	$ 1.18	$ 2.71
Diluted	$ 0.27	$ 0.97	$ 1.17	$ 2.67
Weighted average shares used in per share computation:				
Basic	2,483	2,499	2,495	2,493
Diluted	2,499	2,538	2,517	2,532

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended		Nine Months Ended	
	October 30, 2022	**October 31, 2021**	**October 30, 2022**	**October 31, 2021**
Net income	$ 680	$ 2,464	$ 2,954	$ 6,749
Other comprehensive income (loss), net of tax				
Available-for-sale securities:				
Net change in unrealized loss	(18)	(4)	(53)	(5)
Reclassification adjustments for net realized gain included in net income	—	—	1	—
Net change in unrealized loss	(18)	(4)	(52)	(5)
Cash flow hedges:				
Net unrealized gain (loss)	(14)	22	(44)	(5)
Reclassification adjustments for net realized loss included in net income	(1)	(17)	(16)	—
Net change in unrealized gain (loss)	(15)	5	(60)	(5)
Other comprehensive income (loss), net of tax	(33)	1	(112)	(10)
Total comprehensive income	$ 647	$ 2,465	$ 2,842	$ 6,739

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In millions)
(Unaudited)

	October 30, 2022	January 30, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 2,800	$ 1,990
Marketable securities	10,343	19,218
Accounts receivable, net	4,908	4,650
Inventories	4,454	2,605
Prepaid expenses and other current assets	718	366
Total current assets	23,223	28,829
Property and equipment, net	3,774	2,778
Operating lease assets	927	829
Goodwill	4,372	4,349
Intangible assets, net	1,850	2,339
Deferred income tax assets	2,762	1,222
Other assets	3,580	3,841
Total assets	$ 40,488	$ 44,187
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,491	$ 1,783
Accrued and other current liabilities	4,115	2,552
Short-term debt	1,249	—
Total current liabilities	6,855	4,335
Long-term debt	9,701	10,946
Long-term operating lease liabilities	798	741
Other long-term liabilities	1,785	1,553
Total liabilities	19,139	17,575
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock	—	—
Common stock	2	3
Additional paid-in capital	11,565	10,385
Accumulated other comprehensive loss	(123)	(11)
Retained earnings	9,905	16,235
Total shareholders' equity	21,349	26,612
Total liabilities and shareholders' equity	$ 40,488	$ 44,187

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED OCTOBER 30, 2022 AND OCTOBER 31, 2021
(Unaudited)

(In millions, except per share data)	**Common Stock Outstanding Shares**	**Common Stock Outstanding Amount**	**Additional Paid-in Capital**	**Treasury Stock**	**Accumulated Other Comprehensive Income (Loss)**	**Retained Earnings**	**Total Shareholders' Equity**
Balances, July 31, 2022	2,489	$ 2	$ 10,968	$ —	$ (90)	$ 12,971	$ 23,851
Net income	—	—	—	—	—	680	680
Other comprehensive loss	—	—	—	—	(33)	—	(33)
Issuance of common stock from stock plans	9	—	143	—	—	—	143
Tax withholding related to vesting of restricted stock units	(2)	—	(294)	—	—	—	(294)
Shares repurchased	(28)	—	(1)	—	—	(3,646)	(3,647)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	—	(100)	(100)
Stock-based compensation	—	—	749	—	—	—	749
Balances, October 30, 2022	2,468	$ 2	$ 11,565	$ —	$ (123)	$ 9,905	$ 21,349
Balances, August 1, 2021	2,496	$ 3	$ 9,745	$ (11,604)	$ 8	$ 22,995	$ 21,147
Net income	—	—	—	—	—	2,464	2,464
Other comprehensive income	—	—	—	—	1	—	1
Issuance of common stock from stock plans	8	—	150	—	—	—	150
Tax withholding related to vesting of restricted stock units	(2)	—	—	(434)	—	—	(434)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	—	(100)	(100)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	18	—	—	—	18
Stock-based compensation	—	—	552	—	—	—	552
Balances, October 31, 2021	2,502	$ 3	$ 10,465	$ (12,038)	$ 9	$ 25,359	$ 23,798

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE NINE MONTHS ENDED OCTOBER 30, 2022 AND OCTOBER 31, 2021
(Unaudited)

(In millions, except per share data)	Common Stock Outstanding Shares	Common Stock Outstanding Amount	Additional Paid-in Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
Balances, January 30, 2022	2,506	$ 3	$ 10,385	$ —	$ (11)	$ 16,235	$ 26,612
Net income	—	—	—	—	—	2,954	2,954
Other comprehensive loss	—	—	—	—	(112)	—	(112)
Issuance of common stock from stock plans	24	—	349	—	—	—	349
Tax withholding related to vesting of restricted stock units	(6)	—	(1,131)	—	—	—	(1,131)
Shares repurchased	(56)	(1)	(3)	—	—	(8,984)	(8,988)
Cash dividends declared and paid ($0.12 per common share)	—	—	—	—	—	(300)	(300)
Stock-based compensation	—	—	1,965	—	—	—	1,965
Balances, October 30, 2022	2,468	$ 2	$ 11,565	$ —	$ (123)	$ 9,905	$ 21,349
Balances, January 31, 2021	2,479	$ 3	$ 8,719	$ (10,756)	$ 19	$ 18,908	$ 16,893
Net income	—	—	—	—	—	6,749	6,749
Other comprehensive loss	—	—	—	—	(10)	—	(10)
Issuance of common stock from stock plans	30	—	277	—	—	—	277
Tax withholding related to vesting of restricted stock units	(7)	—	—	(1,282)	—	—	(1,282)
Cash dividends declared and paid ($0.12 per common share)	—	—	—	—	—	(298)	(298)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	18	—	—	—	18
Stock-based compensation	—	—	1,451	—	—	—	1,451
Balances, October 31, 2021	2,502	$ 3	$ 10,465	$ (12,038)	$ 9	$ 25,359	$ 23,798

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Nine Months Ended	
	October 30, 2022	October 31, 2021
Cash flows from operating activities:		
Net income	$ 2,954	$ 6,749
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	1,971	1,453
Acquisition termination cost	1,353	—
Depreciation and amortization	1,118	865
Losses (gains) on investments in non-affiliates, net	35	(152)
Deferred income taxes	(1,517)	(182)
Other	(27)	25
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(258)	(1,523)
Inventories	(1,848)	(400)
Prepaid expenses and other assets	(1,307)	(1,557)
Accounts payable	(358)	385
Accrued and other current liabilities	1,175	159
Other long-term liabilities	102	253
Net cash provided by operating activities	3,393	6,075
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	16,792	7,780
Proceeds from sales of marketable securities	1,806	916
Purchases of marketable securities	(9,764)	(16,020)
Purchases related to property and equipment and intangible assets	(1,324)	(703)
Acquisitions, net of cash acquired	(49)	(203)
Investments and other, net	(83)	(14)
Net cash provided by (used in) investing activities	7,378	(8,244)
Cash flows from financing activities:		
Proceeds related to employee stock plans	349	277
Payments related to repurchases of common stock	(8,826)	—
Payments related to tax on restricted stock units	(1,131)	(1,282)
Dividends paid	(300)	(298)
Principal payments on property and equipment and intangible asset	(54)	(62)
Issuance of debt, net of issuance costs	—	4,977
Repayment of debt	—	(1,000)
Other	1	(2)
Net cash provided by (used in) financing activities	(9,961)	2,610
Change in cash and cash equivalents	810	441
Cash and cash equivalents at beginning of period	1,990	847
Cash and cash equivalents at end of period	$ 2,800	$ 1,288
Supplemental disclosures of cash flow information:		
Cash paid for income taxes, net	$ 1,372	$ 313

See accompanying Notes to Condensed Consolidated Financial Statements.

Note 1 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Securities and Exchange Commission, or SEC, Regulation S-X. The January 30, 2022 consolidated balance sheet was derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022, as filed with the SEC, but does not include all disclosures required by U.S. GAAP. In the opinion of management, all adjustments, consisting only of normal recurring adjustments considered necessary for a fair statement of results of operations and financial position, have been included. The results for the interim periods presented are not necessarily indicative of the results expected for any future period. The following information should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022.

Significant Accounting Policies

There have been no material changes to our significant accounting policies disclosed in Note 1 - Organization and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022.

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal years 2023 and 2022 are both 52-week years. The third quarters of fiscal years 2023 and 2022 were both 13-week quarters.

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 9 have been adjusted to write off immaterial fully amortized intangible assets as of January 30, 2022.

Principles of Consolidation

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

Note 2 - Business Combination

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 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 the first quarter of fiscal year 2023 reflecting the write-off of the prepayment provided at signing.

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 2023 and 2035.

Future minimum lease payments under our non-cancelable operating leases as of October 30, 2022 are as follows:

	Operating Lease Obligations
	(In millions)
Fiscal Year:	
2023 (excluding first nine months of fiscal year 2023)	$ 50
2024	188
2025	167
2026	149
2027	137
2028 and thereafter	393
Total	1,084
Less imputed interest	130
Present value of net future minimum lease payments	954
Less short-term operating lease liabilities	156
Long-term operating lease liabilities	$ 798

In addition to our existing operating lease obligations, we have operating leases, primarily for our data centers, that are expected to commence between the fourth quarter of fiscal year 2023 and fiscal year 2025 with lease terms of 2 to 8 years for $647 million.

Operating lease expenses were $49 million and $44 million for the third quarter of fiscal years 2023 and 2022, respectively, and $139 million and $125 million for the first nine months of fiscal years 2023 and 2022, respectively. Short-term and variable lease expenses for the third quarter and first nine months of fiscal years 2023 and 2022 were not significant.

Other information related to leases was as follows:

	Nine Months Ended	
	October 30, 2022	October 31, 2021
	(In millions)	
Supplemental cash flows information		
Operating cash flows used for operating leases	$ 134	$ 114
Operating lease assets obtained in exchange for lease obligations	$ 213	$ 230

As of October 30, 2022, our operating leases had a weighted average remaining lease term of 6.9 years and a weighted average discount rate of 2.82%. 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%.

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 employee stock purchase plan, or ESPP.

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

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions)			
Cost of revenue	$ 32	$ 44	$ 108	$ 102
Research and development	530	363	1,365	935
Sales, general and administrative	183	152	498	416
Total	$ 745	$ 559	$ 1,971	$ 1,453

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 Per Share
	(In millions, except per share data)	
Balances, January 30, 2022	46	$ 114.19
Granted	23	$ 185.07
Vested restricted stock	(18)	$ 94.82
Canceled and forfeited	(1)	$ 137.27
Balances, October 30, 2022	50	$ 153.73

As of October 30, 2022, there was $7.19 billion of aggregate unearned stock-based compensation expense. This amount is expected to be recognized over a weighted average period of 2.7 years for RSUs, PSUs, and market-based PSUs, and 1.1 years for ESPP.

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:

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions, except per share data)			
Numerator:				
Net income	$ 680	$ 2,464	$ 2,954	$ 6,749
Denominator:				
Basic weighted average shares	2,483	2,499	2,495	2,493
Dilutive impact of outstanding equity awards	16	39	22	39
Diluted weighted average shares	2,499	2,538	2,517	2,532
Net income per share:				
Basic (1)	$ 0.27	$ 0.99	$ 1.18	$ 2.71
Diluted (2)	$ 0.27	$ 0.97	$ 1.17	$ 2.67
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	36	2	29	21

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

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

Note 6 – Income Taxes

We recognized an income tax benefit of $67 million and $61 million for the third quarter and first nine months of fiscal year 2023, respectively, and an income tax expense of $174 million and $327 million for the third quarter and first nine months of fiscal year 2022, respectively. Income tax as a percentage of income before income tax was a benefit of 10.9% and 2.1% for the third quarter and first nine months of fiscal year 2023, respectively, and an expense of 6.6% and 4.6% for the third quarter and first nine months of fiscal year 2022, respectively.

The decrease in our effective tax rate for the third quarter and first nine months of fiscal year 2023 as compared to the same periods of fiscal year 2022 was primarily due to the increased tax benefit of the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to a lower expected 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 discrete benefit from re-valuing certain deferred tax assets in connection with the domestication of one of our foreign subsidiaries, or the Domestication, in fiscal year 2022.

Our effective tax rate for the first nine months of fiscal year 2023 was lower than the U.S. federal statutory rate of 21% due to tax benefits from the foreign-derived intangible income deduction, stock-based compensation and the U.S. federal research tax credit.

Our effective tax rate for the first nine months of fiscal year 2022 was lower than the U.S. federal statutory rate of 21% due to tax benefits from the foreign-derived intangible income deduction, income earned in jurisdictions that are subject to taxes lower than the U.S. federal statutory tax rate, the discrete benefit of the Domestication, and tax benefits related to stock-based compensation and the U.S. federal research tax credit.

For the first nine months of fiscal year 2023, there were no material changes to our tax years that remain subject to examination by major tax jurisdictions. We are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019. Additionally, there have been no material changes to our unrecognized tax benefits and any related interest or penalties since the fiscal year ended January 30, 2022.

While we believe that we have adequately provided for all uncertain tax positions, or tax positions where we believe it is not more-likely-than-not that the position will be sustained upon review, 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 with the respective tax authorities. As of October 30, 2022, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next 12 months.

Note 7 - 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 October 30, 2022 and January 30, 2022:

	October 30, 2022					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
			(In millions)			
Corporate debt securities	$ 4,221	$ —	$ (19)	$ 4,202	$ 239	$ 3,963
Debt securities issued by the U.S. Treasury	4,176	1	(60)	4,117	1	4,116
Debt securities issued by U.S. government agencies	2,259	—	(4)	2,255	344	1,911
Certificates of deposit	316	—	—	316	58	258
Money market funds	1,843	—	—	1,843	1,843	—
Foreign government bonds	99	—	—	99	4	95
Total	$ 12,914	$ 1	$ (83)	$ 12,832	$ 2,489	$ 10,343

	January 30, 2022					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
			(In millions)			
Corporate debt securities	$ 9,977	$ —	$ (3)	$ 9,974	$ 1,102	$ 8,872
Debt securities issued by the U.S. Treasury	7,314	—	(14)	7,300	—	7,300
Debt securities issued by U.S. 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

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

	October 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 U.S. Treasury	$ 1,928	$ (35)	$ 1,051	$ (24)	$ 2,979	$ (59)
Debt securities issued by U.S. government agencies	1,888	(4)	—	—	1,888	(4)
Corporate debt securities	1,786	(18)	208	(2)	1,994	(20)
Total	$ 5,602	$ (57)	$ 1,259	$ (26)	$ 6,861	$ (83)

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 U.S. 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 October 30, 2022 and January 30, 2022 are shown below by contractual maturity.

	October 30, 2022		January 30, 2022	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
		(In millions)		
Less than one year	$ 8,985	$ 8,952	$ 16,346	$ 16,343
Due in 1 - 5 years	3,929	3,880	4,584	4,570
Total	$ 12,914	$ 12,832	$ 20,930	$ 20,913

Note 8 – 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.

	Pricing Category	Fair Value at October 30, 2022	Fair Value at January 30, 2022
		(In millions)	
Assets			
Cash equivalents and marketable securities:			
Money market funds	Level 1	$ 1,843	$ 316
Corporate debt securities	Level 2	$ 4,202	$ 9,974
Debt securities issued by the U.S. Treasury	Level 2	$ 4,117	$ 7,300
Debt securities issued by U.S. government agencies	Level 2	$ 2,255	$ 1,612
Certificates of deposit	Level 2	$ 316	$ 1,561
Foreign government bonds	Level 2	$ 99	$ 150
Other assets (Investment in non-affiliated entities):			
Publicly-held equity securities (1)	Level 1	$ 27	$ 58
Privately-held equity securities	Level 3	$ 287	$ 208
Liabilities (2)			
0.309% Notes Due 2023	Level 2	$ 1,217	$ 1,236
0.584% Notes Due 2024	Level 2	$ 1,168	$ 1,224
3.20% Notes Due 2026	Level 2	$ 945	$ 1,055
1.55% Notes Due 2028	Level 2	$ 1,036	$ 1,200
2.85% Notes Due 2030	Level 2	$ 1,281	$ 1,542
2.00% Notes Due 2031	Level 2	$ 979	$ 1,200
3.50% Notes Due 2040	Level 2	$ 764	$ 1,066
3.50% Notes Due 2050	Level 2	$ 1,427	$ 2,147
3.70% Notes Due 2060	Level 2	$ 344	$ 551

(1) Unrealized losses of $11 million and $35 million from investments in publicly-traded equity securities were recorded in other income (expense), net, in the third quarter and first nine months of fiscal year 2023, respectively. Unrealized gains of $8 million and $126 million from an investment in a publicly-traded equity security were recorded in other income (expense), net, in the third quarter and first nine months of fiscal year 2022, respectively.

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

Note 9 - Amortizable Intangible Assets and Goodwill

The components of our amortizable intangible assets are as follows:

	October 30, 2022			January 30, 2022		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(In millions)					
Acquisition-related intangible assets (1)	$ 3,093	$ (1,441)	$ 1,652	$ 3,061	$ (947)	$ 2,114
Patents and licensed technology	442	(244)	198	446	(221)	225
Total intangible assets	$ 3,535	$ (1,685)	$ 1,850	$ 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.

Amortization expense associated with intangible assets was $181 million and $518 million for the third quarter and first nine months of fiscal year 2023, respectively, and $143 million and $418 million for the third quarter and first nine months of fiscal year 2022, respectively. Future amortization expense related to the net carrying amount of intangible assets as of October 30, 2022 is estimated to be $181 million for the remainder of fiscal year 2023, $600 million in fiscal year 2024, $538 million in fiscal year 2025, $244 million in fiscal year 2026, $141 million in fiscal year 2027, and $146 million in fiscal year 2028 and thereafter.

In the first nine months of fiscal year 2023, goodwill increased by $23 million and intangible assets increased by $33 million from acquisitions. We assigned $14 million of the increase in goodwill to our Compute & Networking segment and $9 million of the increase to our Graphics segment.

Note 10 - Balance Sheet Components

Certain balance sheet components are as follows:

	October 30, 2022	January 30, 2022
Inventories:	*(In millions)*	
Raw materials	$ 1,936	$ 791
Work in-process	788	692
Finished goods	1,730	1,122
Total inventories	$ 4,454	$ 2,605

	October 30, 2022	January 30, 2022
Other assets:	*(In millions)*	
Prepaid supply agreements	$ 2,771	$ 1,747
Prepaid royalties	393	409
Investment in non-affiliated entities	314	266
Advanced consideration for acquisition (1)	—	1,353
Other	102	66
Total other assets	$ 3,580	$ 3,841

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

	October 30, 2022	January 30, 2022
Accrued and Other Current Liabilities:	*(In millions)*	
Customer program accruals	$ 1,394	$ 1,000
Excess inventory purchase obligations	1,181	196
Deferred revenue (1)	338	300
Accrued payroll and related expenses	307	409
Unsettled share repurchases	162	—
Product warranty	104	46
Taxes payable	108	132
Other	521	469
Total accrued and other current liabilities	$ 4,115	$ 2,552

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

	October 30, 2022	January 30, 2022
Other Long-Term Liabilities:	*(In millions)*	
Income tax payable (1)	$ 1,057	$ 980
Deferred income tax	246	245
Deferred revenue (2)	213	202
Other	269	126
Total other long-term liabilities	$ 1,785	$ 1,553

(1) As of October 30, 2022, income tax payable represents the long-term portion of the one-time transition tax payable of $188 million, unrecognized tax benefits of $789 million, and related interest and penalties of $80 million. As of January 30, 2022, income tax payable represents the long-term portion of the one-time transition tax payable of $251 million, unrecognized tax benefits of $670 million, and related interest and penalties of $59 million.
(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 the first nine months of fiscal years 2023 and 2022:

	October 30, 2022	October 31, 2021
	(In millions)	
Balance at beginning of period	$ 502	$ 451
Deferred revenue additions during the period	577	621
Revenue recognized during the period	(528)	(583)
Balance at end of period	$ 551	$ 489

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 October 30, 2022, $681 million of revenue related to 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 October 30, 2022 and January 30, 2022.

We also 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 the 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 October 30, 2022 and January 30, 2022:

	October 30, 2022	January 30, 2022
	(In millions)	
Designated as cash flow hedges	$ 1,139	$ 1,023
Not designated for hedge accounting	$ 330	$ 408

As of October 30, 2022, all designated foreign currency forward contracts mature within 18 months. The expected realized gains and losses deferred into accumulated other comprehensive income or loss related to foreign currency forward contracts within the next twelve months was not significant.

During the first nine months of 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.

Note 12 - Debt

Long-Term Debt

The carrying values of our outstanding notes and their associated interest rates were as follows:

	Expected Remaining Term (years)	Effective Interest Rate	Carrying Value at October 30, 2022	Carrying Value at January 30, 2022
			(In millions)	
0.309% Notes Due 2023	0.6	0.41%	$ 1,250	$ 1,250
0.584% Notes Due 2024	1.6	0.66%	1,250	1,250
3.20% Notes Due 2026	3.9	3.31%	1,000	1,000
1.55% Notes Due 2028	5.6	1.64%	1,250	1,250
2.85% Notes Due 2030	7.4	2.93%	1,500	1,500
2.00% Notes Due 2031	8.6	2.09%	1,250	1,250
3.50% Notes Due 2040	17.4	3.54%	1,000	1,000
3.50% Notes Due 2050	27.4	3.54%	2,000	2,000
3.70% Notes Due 2060	37.4	3.73%	500	500
Unamortized debt discount and issuance costs			(50)	(54)
Net carrying amount			10,950	10,946
Less short-term portion			(1,249)	—
Total long-term portion			$ 9,701	$ 10,946

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 October 30, 2022, we have complied with the required covenants under the notes.

Commercial Paper

We have a $575 million commercial paper program to support general corporate purposes. As of October 30, 2022, we had not issued any commercial paper.

Note 13 - Commitments and Contingencies

Purchase Obligations

Our purchase obligations primarily include 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 $917 million remaining unpaid. As of October 30, 2022, we had outstanding inventory purchase and long-term supply obligations totaling $7.02 billion, inclusive of the $917 million. Other non-inventory purchase obligations of $2.75 billion include $1.59 billion of multi-year cloud service agreements.

Total gross future unconditional purchase commitments as of October 30, 2022 are as follows:

	Commitments
	(In millions)
Fiscal Year:	
2023 (excluding first nine months of fiscal year 2023)	$ 4,234
2024	3,362
2025	798
2026	504
2027	464
2028 and thereafter	410
Total	$ 9,772

Accrual for Product Warranty Liabilities

The estimated amount of product warranty liabilities was $104 million and $46 million as of October 30, 2022 and January 30, 2022, respectively. The estimated product returns and estimated product warranty activity consisted of the following:

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions)			
Balance at beginning of period	$ 168	$ 31	$ 46	$ 22
Additions	3	5	141	20
Utilization	(67)	(4)	(83)	(10)
Balance at end of period	$ 104	$ 32	$ 104	$ 32

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 Condensed Consolidated Financial Statements for such indemnifications.

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, 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 October 30, 2022, 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.

Note 14 - Shareholders' Equity

Capital Return Program

During the third quarter and first nine months of fiscal year 2023, we repurchased 28 million shares for $3.65 billion and 56 million shares for $8.99 billion, respectively. Since the inception of our share repurchase program through October 30, 2022, we have repurchased an aggregate of 1.10 billion shares for $16.07 billion. As of October 30, 2022, we were authorized, subject to certain specifications, to repurchase an additional $8.28 billion of shares through December 2023. From October 31, 2022 through November 17, 2022, we repurchased 7 million shares for $1.05 billion pursuant to a Rule 10b5-1 trading plan.

During the third quarter and first nine months of fiscal year 2023, we paid $100 million and $300 million in cash dividends to our shareholders, respectively. During the third quarter and first nine months of fiscal year 2022, we paid $100 million and $298 million in cash dividends to our shareholders, respectively.

Note 15 - 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.

Our Compute & Networking segment includes Data Center platforms and systems for artificial intelligence, or AI, high-performance computing, and accelerated computing; Mellanox networking and interconnect solutions; automotive AI Cockpit, autonomous driving development agreements, and autonomous vehicle solutions; cryptocurrency mining processors, or CMP; Jetson for robotics and other embedded platforms; and NVIDIA AI Enterprise and other software.

Our 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 software for building 3D designs and virtual worlds.

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.

	Compute & Networking	Graphics	All Other	Consolidated
		(In millions)		
Three Months Ended October 30, 2022				
Revenue	$ 3,816	$ 2,115	$ —	$ 5,931
Operating income (loss)	$ 1,086	$ 606	$ (1,091)	$ 601
Three Months Ended October 31, 2021				
Revenue	$ 3,011	$ 4,092	$ —	$ 7,103
Operating income (loss)	$ 1,332	$ 2,160	$ (821)	$ 2,671
Nine Months Ended October 30, 2022				
Revenue	$ 11,395	$ 9,528	$ —	$ 20,923
Operating income (loss)	$ 3,509	$ 3,739	$ (4,280)	$ 2,968
Nine Months Ended October 31, 2021				
Revenue	$ 7,821	$ 11,450	$ —	$ 19,271
Operating income (loss)	$ 3,227	$ 6,073	$ (2,229)	$ 7,071

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions)			
Reconciling items included in "All Other" category:				
Stock-based compensation expense	$ (745)	$ (559)	$ (1,971)	$ (1,453)
Acquisition-related and other costs	(174)	(156)	(499)	(482)
Unallocated cost of revenue and operating expenses	(156)	(106)	(432)	(286)
Restructuring costs	(16)	—	(16)	—
Acquisition termination cost	—	—	(1,353)	—
IP-related and legal settlement costs	—	—	(7)	(8)
Contributions	—	—	(2)	—
Total	$ (1,091)	$ (821)	$ (4,280)	$ (2,229)

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:

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions)			
Revenue:				
United States	$ 2,148	$ 1,126	$ 6,069	$ 2,890
Taiwan	1,153	2,187	5,134	5,932
China (including Hong Kong)	1,148	2,017	4,831	5,128
Other countries	1,482	1,773	4,889	5,321
Total revenue	$ 5,931	$ 7,103	$ 20,923	$ 19,271

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

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
	(In millions)			
Revenue:				
Data Center	$ 3,833	$ 2,936	$ 11,389	$ 7,350
Gaming	1,574	3,221	7,236	9,042
Professional Visualization	200	577	1,318	1,468
Automotive	251	135	609	441
OEM and Other	73	234	371	970
Total revenue	$ 5,931	$ 7,103	$ 20,923	$ 19,271

One customer represented 10% of our total revenue for the third quarter of fiscal year 2023 and was attributable primarily to the Compute & Networking segment. No customer represented 10% or more of total revenue for the first nine months of fiscal year 2023 and for the third quarter and first nine months of fiscal year 2022.

One customer represented 10% or more of accounts receivable for a total of 12% of our accounts receivable balance as of October 30, 2022. Two customers each represented 10% or more of accounts receivable for a total of 22% as of January 30, 2022.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q, in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022 and in our Quarterly Reports on Form 10-Q for the fiscal quarters ended May 1, 2022 and July 31, 2022 in greater detail under the heading "Risk Factors" of such reports. 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 Quarterly Report on Form 10-Q 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.

NVIDIA, the NVIDIA logo, GeForce, GeForce NOW, GeForce RTX, Mellanox, NVIDIA AI Enterprise, NVIDIA BioNeMo, NVIDIA DGX, NVIDIA DRIVE, NVIDIA DRIVE Orin, NVIDIA DRIVE Thor, NVIDIA Hopper, NVIDIA Jetson, NVIDIA NeMo, NVIDIA Omniverse, NVIDIA RTX and Quadro are trademarks and/or registered trademarks of NVIDIA Corporation in the United States and/or other countries. Other company and product names may be trademarks of the respective companies with which they are associated. Features, pricing, availability, and specifications are subject to change without notice.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the risk factors set forth in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended January 30, 2022 and Part II, Item 1A. "Risk Factors" of this Quarterly Report on Form 10-Q, of our Quarterly Reports on Form 10-Q for the fiscal quarters ended May 1, 2022 and July 31, 2022 and our Condensed Consolidated Financial Statements and related Notes thereto, as well as other cautionary statements and risks described elsewhere in this Quarterly Report on Form 10-Q and our other filings with the SEC, before deciding to purchase 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, autonomous vehicles, robotics, and augmented and virtual reality.

Our two operating segments are "Compute & Networking" and "Graphics," as described in Note 15 of the Notes to Condensed Consolidated Financial Statements.

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

Demand and Supply

Because we do not manufacture the semiconductors used for our products, we are dependent on third parties to manufacture and assemble our products. Our manufacturing lead times are very long, which requires us to make estimates of customers' future demand. At the same time, we do not have a guaranteed supply of wafers, components and capacity, and our supply deliveries and production may be non-linear within a quarter or year, which has previously caused changes to expected revenue and cash flows, and which may reoccur in the future. If our estimates of customer demand are ultimately inaccurate, as we have experienced from time to time, these conditions could lead to 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 significantly harmed our financial results.

We build finished products and maintain inventory in advance of anticipated demand. In periods of shortages impacting the semiconductor industry and/or limited supply or capacity in our supply chain, as we have experienced in the past, the lead time on our orders for certain supply has extended to more than twelve months, compared to a historical lead time of approximately six months. Extended lead times may continue if we experience other supply constraints caused by natural disasters or other events. As a result, we have paid premiums and provided deposits to secure future supply and capacity, which have increased our product costs, and may need to continue to do so in the future. We may not have the ability to reduce our supply commitments at the same rate or at all if our revenue declines. Our supply, which includes inventory on hand, purchase obligations and prepaid supply agreements, has grown significantly due to current supply chain conditions and complexity of our products. Purchase obligations and prepaid supply agreements represent approximately three quarters of our total supply.

Demand for our products is based on many factors, including our product introductions and transitions, time to market, competitor product releases and announcements, competing technologies, and changes in macroeconomic conditions, including rising inflation and fluctuating interest rates. Each of these factors has previously impacted, and can in the future impact, the timing and volume of our revenue. 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 manage shipments of legacy prior architecture products and channel partners prepare and adjust to support new products. We have recently begun transitioning architectures for both our Gaming and Data Center products, which may impair our ability to predict demand and impact our supply mix. We may experience, and have in the past experienced, reduced demand for current generation architectures when customers anticipate transitions. Although we have previously sold multiple product architectures at the same time, this trend may not continue for current and future architecture transitions. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted. Our ability to sell certain products has in the past been and can in the future be impeded if components from third parties that are necessary for the finished product are not available. Additionally, we sell most of our products through channel partners, who sell to retailers, distributors, and/or end customers. As a result, the decisions made by our channel partners, retailers and distributors 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.

COVID-19-related disruptions and lockdowns in China have created and may continue to create supply and logistics constraints. The war in Ukraine has further strained global supply chains and may in the future result in a shortage of key materials that our suppliers, including our foundry partners, require to satisfy our needs.

Our products are designed for the Data Center, Gaming, Professional Visualization and Automotive markets. The use of our GPUs for use cases 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, many 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 or reseller marketplaces compete with our distribution channels.

During the third quarter of fiscal year 2023, the U.S. government, or USG, announced new license requirements that, with certain exceptions, impact exports to China (including Hong Kong) 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. The new license requirements also apply to any future NVIDIA integrated circuit achieving both peak performance and chip-to-chip I/O performance equal to or greater than thresholds that are roughly equivalent to the A100, as well as any system or board that includes those circuits. We are also required to obtain a license to export a wide array of products, including networking products destined for certain end users and any system in China that can achieve single precision performance of 200 Petaops, or double precision performance of 100 Petaops, within a 41,600 cubic feet envelope.

We will be required to transition certain operations out of China, 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 satisfy their demand with 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.

Our revenue, profitability, cash flows, and competitive position may be harmed if customers in China do not want to purchase our alternative product offerings, if we are unable to provide contractual warranty or other extended service obligations, or if the USG does not grant licenses in a timely manner or denies licenses to significant customers. 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 sales and 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.

COVID-19

During the third quarter of fiscal year 2023, we reopened our offices worldwide. We have and expect to incur incremental expenses and related in-office costs as we resume onsite services.

Restrictions may be imposed or reinstated as the pandemic resurfaces, such as ongoing lockdown measures due to COVID-19 containment efforts in China. End customer sales for our products in China have been negatively impacted and this impact may continue if future and continued lockdowns occur. These ongoing COVID-19-related disruptions and lockdowns in China 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

During the first quarter of fiscal year 2023, we paused direct sales to Russia. Direct sales to Russia in fiscal year 2022 were immaterial. Our revenue to partners that sell into Russia may be negatively impacted due to the war in Ukraine and we estimate that in fiscal year 2022, Russia accounted for approximately 2% of total end customer sales and 4% of Gaming end customer sales. During the third quarter of fiscal year 2023, we closed business operations in Russia.

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

Third Quarter of Fiscal Year 2023 Summary

	Three Months Ended				
	October 30, 2022	July 31, 2022	October 31, 2021	Quarter-over-Quarter Change	Year-over-Year Change
	($ in millions, except per share data)				
Revenue	$ 5,931	$ 6,704	$ 7,103	(12)%	(17)%
Gross margin	53.6 %	43.5 %	65.2 %	10.1 pts	(11.6) pts
Operating expenses	$ 2,576	$ 2,416	$ 1,960	7 %	31 %
Income from operations	$ 601	$ 499	$ 2,671	20 %	(77)%
Net income	$ 680	$ 656	$ 2,464	4 %	(72)%
Net income per diluted share	$ 0.27	$ 0.26	$ 0.97	4 %	(72)%

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 the third quarter of fiscal year 2023 was $5.93 billion, down 17% from a year ago and down 12% sequentially.

Data Center revenue was up 31% from a year ago and up 1% sequentially. Year-on-year growth was broad-based across U.S. cloud service providers, consumer internet companies and other vertical industries. Sequential growth was impacted by softness in China. We started shipping our flagship H100 data center GPU based on the new Hopper-architecture.

During the third quarter, the U.S. government announced new restrictions on exports of our A100 and H100-based products to China, and any product destined for certain systems or entities in China. These restrictions impacted third-quarter revenue, with the decline largely offset by sales of alternative products into China.

Gaming revenue was down 51% from a year ago and down 23% sequentially, reflecting lower sell-in to partners to help align channel inventory levels with current demand expectations as macroeconomic conditions and COVID lockdowns in China continue to weigh on consumer demand. The year-on-year decrease was driven by lower GPU sales for both desktops and laptops; the sequential decline was primarily driven by lower GPU sales for laptops. We believe the recent transition in verifying Ethereum cryptocurrency transactions from proof-of-work to proof-of-stake has reduced the utility of GPUs for cryptocurrency mining. This may have contributed to increased aftermarket sales of our GPUs in certain markets, potentially impacting demand for some of our products, particularly in the low-end.

Professional Visualization revenue was down 65% from a year ago and down 60% sequentially, reflecting lower sell-in to partners to help align channel inventory levels with current demand expectations.

Automotive revenue was up 86% from a year ago and up 14% sequentially, primarily driven by revenue from self-driving solutions.

OEM and Other revenue was down 69% from a year ago and down 48% sequentially. The sequential decline was driven by lower Jetson and notebook OEM sales. Cryptocurrency Mining Processor (CMP) revenue was nominal in the current and prior quarter, and $105 million in the third quarter of fiscal year 2022.

Gross margin for the third quarter was down 11.6% from a year earlier, primarily due to a $702 million inventory charge, largely relating to lower Data Center demand in China, partially offset by a warranty-related benefit of approximately $70 million. Sequentially, gross margin was up 10.1% primarily due to lower inventory charges compared with the second quarter. The $702 million inventory charge consists of approximately $354 million for inventory on hand and approximately $348 million for inventory purchase obligations in excess of our current demand projections.

Operating expenses increased primarily due to compensation and data center infrastructure. The year-on-year increase also reflects employee growth.

Cash, cash equivalents and marketable securities were $13.14 billion, down from $19.30 billion a year ago and down from $17.04 billion a quarter ago. The year-on-year and sequential decreases reflect share repurchases and changes in operating cash flow.

During the third quarter and first nine months of fiscal year 2023, we returned $3.75 billion and $9.29 billion to shareholders in the form of share repurchases and cash dividends, respectively. As of the end of the third quarter of fiscal year 2023, we had $8.28 billion remaining under our share repurchase authorization through December 2023.

Market Platform Highlights

In Data Center, we began shipping production samples of the NVIDIA H100 Tensor Core GPU; announced a multi-year collaboration with Microsoft to build a cloud-based AI supercomputer; announced a multi-year partnership with Oracle to bring NVIDIA's full accelerated computing stack to Oracle Cloud Infrastructure; announced that Rescale is integrating NVIDIA AI Enterprise into its HPC-as-service offering; announced two new large language model cloud AI services — NVIDIA NeMo LLM and NVIDIA BioNeMo LLM Service; and announced a new data center solution delivering zero-trust security optimized for VMware vSphere 8.

In Gaming, we began shipping GeForce RTX 4090; introduced NVIDIA DLSS 3; and expanded the GeForce NOW library with 85+ games bringing the total available games to 1,400+.

In Professional Visualization, we introduced NVIDIA Omniverse Cloud.

In Automotive, we introduced NVIDIA DRIVE Thor; announced that Hozon Auto's Neta brand will build future EVs on the NVIDIA DRIVE Orin platform; marked the launch of Polestar 3; and announced new DRIVE IX ecosystem partners.

Financial Information by Business Segment and Geographic Data

Refer to Note 15 of the Notes to Condensed Consolidated Financial Statements for disclosure regarding segment information.

Critical Accounting Policies and Estimates

Refer to Part II, Item 7, "Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the fiscal year ended January 30, 2022. There have been no material changes to our Critical Accounting Policies and Estimates.

Results of Operations

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

	Three Months Ended		Nine Months Ended	
	October 30, 2022	October 31, 2021	October 30, 2022	October 31, 2021
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue	46.4	34.8	44.9	35.3
Gross profit	53.6	65.2	55.1	64.7
Operating expenses				
Research and development	32.8	19.8	25.7	19.7
Sales, general and administrative	10.6	7.8	8.7	8.3
Acquisition termination cost	—	—	6.5	—
Total operating expenses	43.4	27.6	40.9	28.0
Income from operations	10.2	37.6	14.2	36.7
Interest income	1.5	0.1	0.7	0.1
Interest expense	(1.1)	(0.9)	(0.9)	(0.9)
Other, net	(0.2)	0.3	(0.1)	0.8
Other income (expense), net	0.2	(0.5)	(0.3)	—
Income before income tax	10.4	37.1	13.9	36.7
Income tax expense (benefit)	(1.1)	2.4	(0.3)	1.7
Net income	11.5 %	34.7 %	14.2 %	35.0 %

Revenue

Revenue by Reportable Segments

	Three Months Ended				Nine Months Ended			
	October 30, 2022	October 31, 2021	$ Change	% Change	October 30, 2022	October 31, 2021	$ Change	% Change
				($ in millions)				
Compute & Networking	$ 3,816	$ 3,011	$ 805	27 %	$ 11,395	$ 7,821	$ 3,574	46 %
Graphics	2,115	4,092	(1,977)	(48)%	9,528	11,450	(1,922)	(17)%
Total	$ 5,931	$ 7,103	$ (1,172)	(17)%	$ 20,923	$ 19,271	$ 1,652	9 %

Compute & Networking - The year-on-year growth was broad-based across U.S. cloud service providers, consumer internet companies and other vertical industries. We started shipping our flagship H100 data center GPU based on the new Hopper-architecture. CMP contributed an insignificant amount in the third quarter and first nine months of fiscal year 2023 compared to $105 million in the third quarter and $526 million in the first nine months of fiscal year 2022.

Graphics - The year-on-year decreases primarily reflect lower sell-in to partners to help align channel inventory levels with current demand expectations as macroeconomic conditions and COVID lockdowns in China continue to weigh on consumer demand.

Concentration of Revenue

Revenue from sales to customers outside of the United States accounted for 64% and 71% of total revenue for the third quarter and first nine months of fiscal year 2023, respectively, and 84% and 85% of total revenue for the third quarter and first nine months of fiscal year 2022, respectively. 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.

One customer represented 10% of our total revenue for the third quarter of fiscal year 2023 and was attributable primarily to the Compute & Networking segment. No customer represented 10% or more of total revenue for the first nine months of fiscal year 2023 and for the third quarter and first nine months of fiscal year 2022.

Gross Margin

Our overall gross margin decreased to 53.6% and 55.1% for the third quarter and first nine months of fiscal year 2023, respectively, from 65.2% and 64.7% for the third quarter and first nine months of fiscal year 2022, respectively. These decreases were primarily due to $702 million and $2.01 billion of inventory provisions in the third quarter and first nine months of fiscal year 2023, respectively. The third quarter of fiscal year 2023 included a warranty-related benefit of approximately $70 million. The $702 million inventory provision consists of approximately $354 million for inventory on hand and approximately $348 million for inventory purchase obligations in excess of our current demand projections. The $2.01 billion inventory provision in the first nine months of fiscal year 2023 consists of approximately $942 million for inventory on hand and approximately $1.07 billion for inventory purchase obligations in excess of our current demand projections.

Inventory provisions totaled $702 million and $107 million for the third quarter of fiscal years 2023 and 2022, respectively. Sales of inventory that was previously written-off or down totaled $21 million and $48 million for the third quarter of fiscal years 2023 and 2022, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 11.5% and 0.8% in the third quarter of fiscal years 2023 and 2022, respectively.

Inventory provisions totaled $2.01 billion and $238 million for the first nine months of fiscal years 2023 and 2022, respectively. Sales of inventory that was previously written-off or down totaled $59 million and $89 million for the first nine months of fiscal years 2023 and 2022, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 9.3% and 0.8% in the first nine months of fiscal years 2023 and 2022, respectively.

Compute & Networking - The gross margin of our Compute & Networking segment decreased during the third quarter and first nine months of fiscal year 2023 compared to the third quarter and first nine months of fiscal year 2022, primarily due to inventory provisions.

Graphics - The gross margin of our Graphics segment decreased during the third quarter of fiscal year 2023 compared to the third quarter of fiscal year 2022 primarily due to a lower-end mix within GeForce GPUs. The decrease in the first nine months of fiscal year 2023 compared to the first nine months of fiscal year 2022 was primarily related to inventory and related provisions and pricing programs.

Operating Expenses

	Three Months Ended				Nine Months Ended			
	October 30, 2022	October 31, 2021	$ Change	% Change	October 30, 2022	October 31, 2021	$ Change	% Change
				($ in millions)				
Research and development expenses	$ 1,945	$ 1,403	$ 542	39 %	$ 5,387	$ 3,802	$ 1,585	42 %
% of net revenue	*33 %*	*20 %*			*26 %*	*20 %*		
Sales, general and administrative expenses	631	557	74	13 %	1,815	1,603	212	13 %
% of net revenue	*11 %*	*8 %*			*9 %*	*8 %*		
Acquisition termination cost	—	—	—	— %	1,353	—	1,353	(100)%
% of net revenue	— %	— %			6 %	— %		
Total operating expenses	$ 2,576	$ 1,960	$ 616	31 %	$ 8,555	$ 5,405	$ 3,150	58 %

Research and development expense increases for the third quarter of fiscal year 2023 were primarily driven by compensation, employee growth and data center infrastructure. Research and development expense increases for the first nine months of fiscal year 2023 were primarily driven by compensation, employee growth and engineering development costs.

Sales, general and administrative expense increases were primarily driven by compensation and employee growth.

We recorded an acquisition termination cost related to the Arm transaction of $1.35 billion in the first quarter of fiscal year 2023 reflecting the write-off of the prepayment provided at signing in September 2020.

Other Income (Expense), Net

	Three Months Ended				Nine Months Ended			
	October 30, 2022	October 31, 2021	$ Change	% Change	October 30, 2022	October 31, 2021	$ Change	% Change
				($ in millions)				
Interest income	$ 88	$ 7	$ 81	1,157 %	$ 152	$ 20	$ 132	660 %
Interest expense	(65)	(62)	(3)	5 %	(198)	(175)	(23)	13 %
Other, net	(11)	22	(33)	(150)%	(29)	160	(189)	(118)%
Total	$ 12	$ (33)	$ 45	(136)%	$ (75)	$ 5	$ (80)	(1,600)%

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

Interest expense is primarily comprised of coupon interest and debt discount amortization related to our notes. The increase in expense for the first nine months of fiscal year 2023 compared to the first nine months of fiscal year 2022 reflects interest on the $5.00 billion note 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. Changes in other, net, compared to the third quarter and first nine months of fiscal year 2022 were primarily driven by mark-to-market impact from publicly traded equity investments and changes in value from our non-affiliated private investments. Refer to Note 8 of the Notes to Condensed Consolidated Financial Statements for additional information regarding our investments in non-affiliated entities.

Income Taxes

We recognized an income tax benefit of $67 million and $61 million for the third quarter and first nine months of fiscal year 2023, respectively, and an income tax expense of $174 million and $327 million for the third quarter and first nine months of fiscal year 2022, respectively. Income tax as a percentage of income before income tax was a benefit of 10.9% and 2.1% for the third quarter and first nine months of fiscal year 2023, respectively, and an expense of 6.6% and 4.6% for the third quarter and first nine months of fiscal year 2022, respectively.

The decrease in our effective tax rate for the third quarter and first nine months of fiscal year 2023 as compared to the same periods of fiscal year 2022 was primarily due to the increased tax benefit of the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to a lower expected 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 discrete benefit from re-valuing certain deferred tax assets in connection with the Domestication in fiscal year 2022.

Liquidity and Capital Resources

	October 30, 2022	January 30, 2022
	(In millions)	
Cash and cash equivalents	$ 2,800	$ 1,990
Marketable securities	10,343	19,218
Cash, cash equivalents and marketable securities	$ 13,143	$ 21,208

	Nine Months Ended	
	October 30, 2022	October 31, 2021
	(In millions)	
Net cash provided by operating activities	$ 3,393	$ 6,075
Net cash provided by (used in) investing activities	$ 7,378	$ (8,244)
Net cash provided by (used in) financing activities	$ (9,961)	$ 2,610

As of October 30, 2022, we had $13.14 billion in cash, cash equivalents and marketable securities, a decrease of $8.07 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 the first nine months of fiscal year 2023 compared to the first nine months of fiscal year 2022, primarily due to tax payments, and a decrease in net income adjusted for certain non-cash items, such as the Arm acquisition termination cost of $1.35 billion, partially offset by changes in working capital.

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

Cash used in financing activities increased in the first nine months of fiscal year 2023 compared to the first nine months of fiscal year 2022, which primarily reflects share repurchases and the absence of debt issuance proceeds in the first nine months of fiscal year 2023.

Liquidity

Our primary sources of liquidity are our cash and cash equivalents, our marketable securities, and the cash generated by our operations. As of October 30, 2022, we had $13.14 billion in cash, cash equivalents, and marketable securities. 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 7 of the Notes to Condensed Consolidated Financial Statements for additional information. 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 debt due in fiscal year 2024. We continuously evaluate our liquidity and capital resources, including our access to external capital, to ensure we can finance our future capital requirements.

For fiscal year 2023, 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 $1.80 billion to $2.00 billion related to property and equipment.

We have 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. Other than that, substantially all of our cash, cash equivalents and marketable securities held outside of the U.S. as of October 30, 2022 are available for use in the U.S. without incurring additional U.S. federal income taxes. We utilized nearly all our accumulated U.S. federal research tax credits during fiscal year 2022, which has resulted in higher cash tax payments starting in fiscal year 2023. In addition, beginning in fiscal year 2023, the 2017 Tax Cuts and Jobs Act requires taxpayers to capitalize research and development expenditures and to amortize domestic expenditures over five years and foreign expenditures over fifteen years. This will impact cash flows from operations and will result in significantly higher cash tax payments starting in fiscal year 2023.

Capital Return to Shareholders

During the third quarter and first nine months of fiscal year 2023, we returned $3.65 billion and $8.99 billion, respectively, in share repurchases and $100 million and $300 million, respectively, in cash dividends. From October 31, 2022 through November 17, 2022, we repurchased 7 million shares for $1.05 billion pursuant to a Rule 10b5-1 trading plan.

Our cash dividend program and the payment of future cash dividends under that program are subject to the continuing determination by our Board of Directors that the dividend program and the declaration of dividends are in the best interests of our shareholders.

Outstanding Indebtedness and Commercial Paper

As of October 30, 2022, we had outstanding:

- $1.25 billion of Notes Due 2023;
- $1.25 billion of Notes Due 2024;
- $1.00 billion of Notes Due 2026;
- $1.25 billion of Notes Due 2028;
- $1.50 billion of Notes Due 2030;
- $1.25 billion of Notes Due 2031;
- $1.00 billion of Notes Due 2040;
- $2.00 billion of Notes Due 2050; and
- $500 million of Notes Due 2060.

We have a $575 million commercial paper program to support general corporate purposes. As of October 30, 2022, we had not issued any commercial paper.

Contractual Obligations

We have unrecognized tax benefits of $869 million, which includes related interest and penalties of $80 million recorded in non-current income tax payable as of October 30, 2022. 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 6 of the Notes to Condensed Consolidated Financial Statements for further information.

Other than the contractual obligations described above, there were no material changes outside the ordinary course of business in our contractual obligations from those disclosed in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022. Refer to Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022 for a description of our contractual obligations. For a description of our operating lease obligations, long-term debt, and purchase obligations, refer to Note 3, Note 12, and Note 13 of the Notes to Condensed Consolidated Financial Statements, respectively.

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

There has been no adoption of any new and recently issued accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Investment and Interest Rate Risk

Financial market risks related to investment and interest rate risk are described in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022. As of October 30, 2022, there have been no material changes, including the impact of the COVID-19 pandemic, to the financial market risks described as of January 30, 2022.

Foreign Exchange Rate Risk

The impact of foreign currency transactions related to foreign exchange rate risk is described in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022. As of October 30, 2022, there have been no material changes, including the impact of the COVID-19 pandemic, to the foreign exchange rate risks described as of January 30, 2022.

Refer to Note 11 of the Notes to Condensed Consolidated Financial Statements for additional information.

ITEM 4. CONTROLS AND PROCEDURES

Controls and Procedures

Disclosure Controls and Procedures

Based on their evaluation as of October 30, 2022, 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 under the Securities Exchange Act of 1934, as amended) were effective to provide reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes that occurred during the third quarter of fiscal year 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.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Part I, Item 1, Note 13 of the Notes to Condensed Consolidated Financial Statements for a discussion of significant developments in our legal proceedings since January 30, 2022. Also refer to Item 3, "Legal Proceedings" in our Annual Report on Form 10-K for the fiscal year ended January 30, 2022 for a prior discussion of our legal proceedings.

ITEM 1A. RISK FACTORS

Other than the risk factors listed below, there have been no material changes from the risk factors previously described under Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 30, 2022 and Items 1A of our Quarterly Reports on Form 10-Q for the fiscal quarters ended May 1, 2022 and July 31, 2022.

Before you buy our common stock, you should know that making such an investment involves some risks including, but not limited to, the risks described in Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 30, 2022, in Items 1A of our Quarterly Reports on Form 10-Q for the fiscal quarters ended May 1, 2022 and July 31, 2022, and below. Additionally, any one of those risks could harm our business, financial condition and results of operations, which could cause our stock price to decline. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

If we fail to estimate customer demand properly, mismatches between supply and demand can occur, harming our financial results.

Because we do not manufacture the semiconductors used for our products, we are dependent on third parties to manufacture and assemble our products. Our manufacturing lead times are very long, which requires us to make estimates of customers' future demand. At the same time, we do not have a guaranteed supply of wafers, components and capacity, and our supply deliveries and production may be non-linear within a quarter or year, which has previously caused changes to expected revenue and cash flows, and which may reoccur in the future. If our estimates of customer demand are ultimately inaccurate, as we have experienced from time to time, these conditions could lead to 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 significantly harmed our financial results.

We build finished products and maintain inventory in advance of anticipated demand. In periods of shortages impacting the semiconductor industry and/or limited supply or capacity in our supply chain, as we have experienced in the past, the lead time on our orders for certain supply has extended to more than twelve months, compared to a historical lead time of approximately six months. As a result, we have paid premiums and provided deposits to secure future supply and capacity, which have increased our product costs, and may need to continue to do so in the future. We may not have the ability to reduce our supply commitments at the same rate or at all if our revenue declines. Our supply, which includes inventory on hand, purchase obligations and prepaid supply agreements, has grown significantly due to current supply chain conditions and complexity of our products. Purchase obligations and prepaid supply agreements represent approximately three quarters of our total supply.

Demand for our products is based on many factors, including our product introductions and transitions, time to market, competitor product releases and announcements, competing technologies, and changes in macroeconomic conditions, including rising inflation and fluctuating interest rates. Each of these factors has previously impacted, and can in the future impact, the timing and volume of our revenue. 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 manage shipments of legacy prior architecture products and channel partners prepare and adjust to support new products. We have recently begun transitioning architectures for both our Gaming and Data Center products, which may impair our ability to predict demand and impact our supply mix. We may experience, and have in the past experienced, reduced demand for current generation architectures when customers anticipate transitions. Although we have previously sold multiple product architectures at the same time, this trend may not continue for current and future architecture transitions. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted. Our ability to sell certain products has in the past been and can in the future be impeded if components from third parties that are necessary for the finished product are not available. Additionally, we sell most of our products through channel partners, who sell to retailers, distributors, and/or end customers. As a result, the decisions made by our channel partners, retailers and distributors 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 original equipment 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.

On the other hand, if we overestimate our customers' future demand for our products, and if customers cancel or defer orders or choose to purchase from our competitors, we may not be able to reduce our inventory purchase commitments. In the past, we have experienced a reduction in average selling prices, including as a result of channel pricing programs that we have implemented in the past and may continue to implement, as a result of our overestimation of future demand, which has reduced our revenue and gross margins, and we may need to continue these reductions. We have had to increase prices for our Data Center products as a result of our suppliers' increase in prices, and may need to continue to do so for other products in the future, which may negatively impact demand. We have also written-down our inventory, incurred cancellation penalties, and recorded impairments, negatively impacting our gross margins and our overall financial results. 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 recently, as our purchase obligations and prepaids have grown and become a greater portion of our total supply while our revenue has sequentially declined.

In addition to the growing lead times described above, there are many factors 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. Those factors include such things as:

- changes in business and economic conditions resulting in decreased consumer confidence, including downturns in our target markets and/or overall economy, rising inflation, currency fluctuations, and changes in the credit market;
- sudden or sustained government lockdowns or actions to control COVID-19 case spread;
- rapidly changing technology or customer requirements;
- new product introductions resulting in less demand for existing products;
- new or unexpected end use cases;
- increase in demand for competitive products, including competitive actions;
- fluctuations in demand for our products related to cryptocurrency mining; or
- changes in governmental policies, such as increased restrictions on gaming usage or cloud service providers.

COVID-19-related disruptions and lockdowns in China have created and may continue to create supply and logistics constraints. The war in Ukraine has further strained global supply chains and may in the future result in a shortage of key materials that our suppliers, including our foundry partners, require to satisfy our needs. Extended lead times may continue if we experience other supply constraints caused by natural disasters or other events. In addition, geopolitical tensions 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.

Our products are designed for the Data Center, Gaming, Professional Visualization and Automotive markets. The use of our GPUs for use cases 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, many 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 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 or reseller marketplaces compete with our distribution channels.

Restrictions may be imposed or reinstated as the pandemic resurfaces, such as ongoing lockdown measures due to COVID-19 containment efforts in China. End customer sales for our products in China have been negatively impacted and this impact may continue if future and continued lockdowns occur. These ongoing COVID-19-related disruptions and lockdowns in China 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.

We depend on third parties and their technology to manufacture, assemble, test, package or design our products, which reduces our control over product quantity and quality, manufacturing yields, development, enhancement and product delivery schedule and could harm our business.

We do not manufacture the semiconductors used for our products and do not own or operate a wafer fabrication facility. 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. While we have entered in the past 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. We face several risks which 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 wafers, components 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;
- 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 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’ 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 heat wave closures and electricity conservation efforts.

We have incurred and could in the future incur significant expenses to remediate defects in our products, 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 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 personnel from our product development efforts to find and correct the issue. Our efforts to remedy these issues may not be timely or may not be satisfactory to our customers. An error or defect in new products or 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. While we have been working to fix the defect, we have needed to replace those products instead of repairing them, resulting in greater costs to us. These costs could be significant in future periods. We recorded $122 million for warranty reserves in the second quarter of fiscal year 2023 primarily in connection with this defect. While we believe we have accurately recorded for the warranty reserve, we may need to record additional amounts in the future if our estimate proves to be incorrect. Additionally, we are investigating failures of power connectors shipped with our recently launched GeForce RTX 4090, which may harm sales of the 4090 or future products. 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.

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. 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. For example, the war in Ukraine has had and will likely continue to have a negative impact on our employees or operations both within and outside Ukraine. In connection with multiple sanctions on Russia, we stopped direct sales to Russia in the first quarter of fiscal year 2023 and closed business operations in Russia in the third quarter of fiscal year 2023. Additionally, the ongoing war could result in a shortage of key materials that our suppliers, including our foundry partners, require to satisfy our needs. 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.

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. We also must recruit and develop diverse talent. Changes in immigration and work permit regulations or in their administration or interpretation could impair our ability to attract and retain qualified employees. If we are less successful in our recruiting efforts, or if we cannot retain key employees, our business may be adversely affected. 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 recently, the retentive value of our stock-based compensation may decrease. We also must retain the key personnel hired as a result of our acquisitions, or it could reduce the anticipated benefits of those transactions. 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.

The COVID-19 pandemic continues to impact our business and could materially adversely affect our financial condition and results of operations.

The COVID-19 pandemic has impacted, and continues to impact, our workforce and operations and those of our customers, partners, vendors and suppliers. As the pandemic continues to evolve, the increased duration and impact of economic and demand uncertainty, and the limited availability of our supply chain, logistical services and component supply, may have a material net negative impact on our business and financial results. COVID-19 containment around the world has put restrictions on, among other areas, manufacturing facilities, commerce, and support operations, which could limit our capacity to meet customer demand. For example, ongoing lockdown measures due to COVID-19 containment efforts in China have impacted end customer sales, disrupted our partners' operations, created logistics and delivery bottlenecks, and further curtailed supply, and may continue to do so in the future.

COVID-19's effect on the global economy and our business is difficult to assess or predict. It has resulted in, and may continue to result in, disruption of global financial markets, which could negatively affect our stock price and liquidity. Volatility in the financial markets could impact overall technology spending, adversely affecting demand for our products, our business and the value of our common stock.

We have modified our business and workforce practices in response to COVID-19, and we may take further actions as required by government regulations or in the best interests of our employees, customers, partners and suppliers. There is no certainty that our actions will be sufficient to mitigate the risks posed by the disease, and our ability to perform critical functions could be harmed. As our offices have reopened, we have incurred and expect to continue to incur incremental expenses and related in-office costs as we resume onsite services.

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. We have experienced supply chain and economic disruption, in part as a result of the COVID-19 pandemic which has negatively impacted and could have a material negative impact on our business, results of operations, financial condition, and access to sources of liquidity.

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; 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 impact our business operations negatively. For example, the Foreign Corrupt Practices Act and other anti-corruption laws and regulations prohibit us from engaging in certain business practices. There can be no assurance that our employees, contractors, suppliers, or agents will not violate policies, controls, and procedures that we have designed to help ensure compliance with applicable laws. Violations of these laws and regulations can result in fines; criminal sanctions against us, our officers, or our employees; prohibitions on the conduct of our business; and damage to our reputation. Should any of these laws, rules and regulations be amended or expanded, or new ones enacted, we could incur materially greater compliance costs and/or restrictions on our ability to manufacture 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.

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. For example, in response to the war in Ukraine, the United States and certain allies have imposed economic sanctions and export control measures and may impose additional sanctions or export control measures, which have resulted in and could in the future result in, among other things, severe or complete restrictions on exports to and other commerce and business dealings involving Russia, Belarus, certain regions of Ukraine, and/or particular entities and individuals. Such actions have limited or blocked, or could in the future limit or block the passage of our products, services and support into Russia, Belarus, and certain regions of Ukraine or other regions determined to be supporting Russia, which may result in claims brought against us for failure to fulfill our contractual obligations, and restrict access by our employees (both within and outside of Ukraine) to our systems, negatively impacting productivity. Given these recent sanctions and export restrictions imposed by the United States and foreign government bodies, during the first quarter of fiscal year 2023, we paused all direct sales to Russia, and during the third quarter of fiscal year 2023, we 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. While we have policies and procedures in place to ensure compliance with sanctions and trade restrictions, our employees, contractors, partners, and agents may take actions in violations of such policies and applicable law, for which we may be ultimately held responsible. 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. 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.

Geopolitical tensions and conflicts worldwide, 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, trade policies, export controls, import duties and economic disruptions that could impact our operating strategies, product demand, access to global markets, hiring, and profitability. The increasing focus on the strategic importance of AI technologies may result in additional regulatory restrictions that target products and services capable of enabling or facilitating AI, including 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 license requirements that, with certain exceptions, impact exports to China (including Hong Kong) 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. The new license requirements also apply to any future NVIDIA integrated circuit achieving both peak performance and chip-to-chip I/O performance equal to or greater than thresholds that are roughly equivalent to the A100, as well as any system or board that includes those circuits. We are also required to obtain a license to export a wide array of products, including networking products destined for certain end users and any system in China that can achieve single precision performance of 200 Petaops, or double precision performance of 100 Petaops, within a 41,600 cubic feet envelope.

We will be required to transition certain operations out of China, 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 satisfy their demand with 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.

Our revenue, profitability, cash flows, and competitive position may be harmed if customers in China do not want to purchase our alternative product offerings, if we are unable to provide contractual warranty or other extended service obligations, or if the USG does not grant licenses in a timely manner or denies licenses to significant customers. 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 sales and 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.

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. Additionally, revisions to laws or regulations or their interpretation and enforcement could 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. Furthermore, a tariff exclusion on our graphics cards is scheduled to expire in December 2022. If we are unable to obtain an extension of this tariff exclusion, or if the value of our graphics cards increases due to our adoption of a change in tariff valuation methodology, our profitability may be negatively impacted.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

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 through October 30, 2022, we have repurchased an aggregate of 1.10 billion shares for $16.07 billion through October 30, 2022. As of October 30, 2022, we were authorized, subject to certain specifications, to repurchase an additional $8.28 billion of shares 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 Securities Exchange Act of 1934, as amended, 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.

During the third quarter and first nine months of fiscal year 2023, we paid $100 million and $300 million in cash dividends to our shareholders, respectively.

The following table presents details of our share repurchase transactions during the third 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)
August 1, 2022 - August 28, 2022	1	$ 169.07	1	$ 11.82
August 29, 2022 - September 25, 2022	10	$ 133.80	10	$ 10.40
September 26, 2022 - October 30, 2022	17	$ 123.96	17	$ 8.28
Total	28		28	

From October 31, 2022 through November 17, 2022, we repurchased 7 million shares for $1.05 billion pursuant to a Rule 10b5-1 trading plan.

Restricted Stock Unit Share Withholding

We also 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 the third quarter of fiscal year 2023, we withheld approximately 2 million shares at a total cost of $294 million through net share settlements. During the first nine months of fiscal year 2023, we withheld approximately 6 million shares at a total cost of $1.13 billion through net share settlements.

ITEM 6. EXHIBITS

Exhibit No.	Exhibit Description	Schedule /Form	File Number	Exhibit	Filing Date
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*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document				
101.PRE*	Inline 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.

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 Quarterly Report on Form 10-Q 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.

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.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 18, 2022

NVIDIA Corporation

By: /s/ Colette M. Kress

Colette M. Kress
Executive Vice President and Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION

I, Jen-Hsun Huang, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 18, 2022

/s/JEN-HSUN HUANG
Jen-Hsun Huang
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Colette M. Kress, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 18, 2022

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Jen-Hsun Huang, the President and Chief Executive Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended October 30, 2022, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: November 18, 2022

/s/JEN-HSUN HUANG

Jen-Hsun Huang
President and Chief Executive Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

EXHIBIT 32.2

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Colette M. Kress, the Executive Vice President and Chief Financial Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of her knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended October 30, 2022, to which this Certification is attached as Exhibit 32.2 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: November 18, 2022

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

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

FORM 10-Q

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

For the quarterly period ended April 30, 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	**94-3177549**
(State or Other Jurisdiction of Incorporation or Organization)	**(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)

N/A
(Former name, former address and former fiscal year if changed since last report)

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

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 definitions of “large accelerated filer”, “accelerated filer”, “smaller reporting company”, and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

The number of shares of common stock, $0.001 par value, outstanding as of May 19, 2023, was 2.47 billion.

NVIDIA CORPORATION
FORM 10-Q
FOR THE QUARTER ENDED April 30, 2023

TABLE OF CONTENTS

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 Company Blog (http://blogs.nvidia.com)

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

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

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

NVIDIA Twitter Account (https://twitter.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 Quarterly Report on Form 10-Q. These channels may be updated from time to time on NVIDIA's investor relations website.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
Revenue	$ 7,192	$ 8,288
Cost of revenue	2,544	2,857
Gross profit	4,648	5,431
Operating expenses		
Research and development	1,875	1,618
Sales, general and administrative	633	592
Acquisition termination cost	—	1,353
Total operating expenses	2,508	3,563
Income from operations	2,140	1,868
Interest income	150	18
Interest expense	(66)	(68)
Other, net	(15)	(13)
Other income (expense), net	69	(63)
Income before income tax	2,209	1,805
Income tax expense	166	187
Net income	$ 2,043	$ 1,618
Net income per share:		
Basic	$ 0.83	$ 0.65
Diluted	$ 0.82	$ 0.64
Weighted average shares used in per share computation:		
Basic	2,470	2,506
Diluted	2,490	2,537

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
Net income	$ 2,043	$ 1,618
Other comprehensive loss, net of tax		
Available-for-sale securities:		
Net change in unrealized gain (loss)	17	(22)
Cash flow hedges:		
Net unrealized loss	(13)	(29)
Reclassification adjustments for net realized loss included in net income	(11)	(2)
Net change in unrealized loss	(24)	(31)
Other comprehensive loss, net of tax	(7)	(53)
Total comprehensive income	$ 2,036	$ 1,565

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In millions)
(Unaudited)

	April 30, 2023	January 29, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,079	$ 3,389
Marketable securities	10,241	9,907
Accounts receivable, net	4,080	3,827
Inventories	4,611	5,159
Prepaid expenses and other current assets	872	791
Total current assets	24,883	23,073
Property and equipment, net	3,740	3,807
Operating lease assets	1,094	1,038
Goodwill	4,430	4,372
Intangible assets, net	1,541	1,676
Deferred income tax assets	4,568	3,396
Other assets	4,204	3,820
Total assets	$ 44,460	$ 41,182
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,141	$ 1,193
Accrued and other current liabilities	4,869	4,120
Short-term debt	1,250	1,250
Total current liabilities	7,260	6,563
Long-term debt	9,704	9,703
Long-term operating lease liabilities	939	902
Other long-term liabilities	2,037	1,913
Total liabilities	19,940	19,081
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock	—	—
Common stock	2	2
Additional paid-in capital	12,453	11,971
Accumulated other comprehensive loss	(50)	(43)
Retained earnings	12,115	10,171
Total shareholders' equity	24,520	22,101
Total liabilities and shareholders' equity	$ 44,460	$ 41,182

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED APRIL 30, 2023 AND MAY 1, 2022
(Unaudited)

(In millions, except per share data)	Common Stock Outstanding Shares	Common Stock Outstanding Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity
Balances, January 29, 2023	2,466	$ 2	$ 11,971	$ (43)	$ 10,171	$ 22,101
Net income	—	—	—	—	2,043	2,043
Other comprehensive loss	—	—	—	(7)	—	(7)
Issuance of common stock from stock plans	9	—	246	—	—	246
Tax withholding related to vesting of restricted stock units	(2)	—	(507)	—	—	(507)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(99)	(99)
Stock-based compensation	—	—	743	—	—	743
Balances, April 30, 2023	2,473	$ 2	$ 12,453	$ (50)	$ 12,115	$ 24,520
Balances, January 30, 2022	2,506	$ 3	$ 10,385	$ (11)	$ 16,235	$ 26,612
Net income	—	—	—	—	1,618	1,618
Other comprehensive loss	—	—	—	(53)	—	(53)
Issuance of common stock from stock plans	9	—	204	—	—	204
Tax withholding related to vesting of restricted stock units	(2)	—	(538)	—	—	(538)
Shares repurchased	(9)	—	(1)	—	(1,995)	(1,996)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(100)	(100)
Stock-based compensation	—	—	573	—	—	573
Balances, May 1, 2022	2,504	$ 3	$ 10,623	$ (64)	$ 15,758	$ 26,320

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
Cash flows from operating activities:		
Net income	$ 2,043	$ 1,618
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	735	578
Depreciation and amortization	384	334
Losses on investments in non-affiliates	14	17
Deferred income taxes	(1,135)	(542)
Acquisition termination cost	—	1,353
Other	(34)	23
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(252)	(788)
Inventories	566	(560)
Prepaid expenses and other assets	(215)	(1,261)
Accounts payable	11	255
Accrued and other current liabilities	689	634
Other long-term liabilities	105	70
Net cash provided by operating activities	2,911	1,731
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	2,512	5,947
Proceeds from sales of marketable securities	—	1,029
Purchases of marketable securities	(2,801)	(3,932)
Purchases related to property and equipment and intangible assets	(248)	(361)
Acquisitions, net of cash acquired	(83)	(36)
Investments and other, net	(221)	(35)
Net cash provided by (used in) investing activities	(841)	2,612
Cash flows from financing activities:		
Proceeds related to employee stock plans	246	204
Payments related to tax on restricted stock units	(507)	(532)
Dividends paid	(99)	(100)
Principal payments on property and equipment and intangible assets	(20)	(22)
Payments related to repurchases of common stock	—	(1,996)
Net cash used in financing activities	(380)	(2,446)
Change in cash and cash equivalents	1,690	1,897
Cash and cash equivalents at beginning of period	3,389	1,990
Cash and cash equivalents at end of period	$ 5,079	$ 3,887

See accompanying Notes to Condensed Consolidated Financial Statements.

Note 1 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Securities and Exchange Commission, or SEC, Regulation S-X. The January 29, 2023 consolidated balance sheet was derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, as filed with the SEC, but does not include all disclosures required by U.S. GAAP. In the opinion of management, all adjustments, consisting only of normal recurring adjustments considered necessary for a fair statement of results of operations and financial position, have been included. The results for the interim periods presented are not necessarily indicative of the results expected for any future period. The following information should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Significant Accounting Policies

There have been no material changes to our significant accounting policies disclosed in Note 1 - Organization and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal years 2024 and 2023 are both 52-week years. The first quarters of fiscal years 2024 and 2023 were both 13-week quarters.

Reclassifications

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

Principles of Consolidation

Our condensed 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, property, plant, and equipment, and other contingencies. 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 our server, storage, and network equipment from three to a range of four to five years, and our 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, the effect of this change in estimate for the three months ended April 30, 2023, was a benefit of $2 million and $31 million for cost of revenue and operating expenses, respectively. This resulted in an increase in operating income of $33 million and net income of $28 million after tax, or $0.01 per both basic and diluted share.

Note 2 - Business Combination

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 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.

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 April 30, 2023 are as follows:

	Operating Lease Obligations
	(In millions)
Fiscal Year:	
2024 (excluding first quarter)	$ 178
2025	218
2026	196
2027	180
2028	159
2029 and thereafter	357
Total	1,288
Less imputed interest	162
Present value of net future minimum lease payments	1,126
Less short-term operating lease liabilities	187
Long-term operating lease liabilities	$ 939

In addition, we have operating leases, primarily for our data centers, that are expected to commence between the second quarter of fiscal year 2024 and fiscal year 2025 with lease terms of 2 to 8 years for $361 million.

Operating lease expenses were $59 million and $44 million for the first quarter of fiscal years 2024 and 2023, respectively. Short-term and variable lease expenses for the first quarter of fiscal years 2024 and 2023 were not significant.

Other information related to leases was as follows:

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Supplemental cash flows information		
Operating cash flows used for operating leases	$ 61	$ 45
Operating lease assets obtained in exchange for lease obligations	$ 106	$ 62

As of April 30, 2023, our operating leases had a weighted average remaining lease term of 6.6 years and a weighted average discount rate of 3.33%. 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%.

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 employee stock purchase plan, or ESPP.

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Cost of revenue	$ 27	$ 38
Research and development	524	384
Sales, general and administrative	184	156
Total	$ 735	$ 578

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 Per Share
	(In millions, except per share data)	
Balances, January 29, 2023	45	$ 158.45
Granted	2	$ 226.08
Vested restricted stock	(6)	$ 115.99
Canceled and forfeited	(1)	$ 199.37
Balances, April 30, 2023	40	$ 167.07

As of April 30, 2023, there was $6.55 billion of aggregate unearned stock-based compensation expense. This amount is expected to be recognized over a weighted average period of 2.5 years for RSUs, PSUs, and market-based PSUs, and 1.1 years for ESPP.

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:

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions, except per share data)	
Numerator:		
Net income	$ 2,043	$ 1,618
Denominator:		
Basic weighted average shares	2,470	2,506
Dilutive impact of outstanding equity awards	20	31
Diluted weighted average shares	2,490	2,537
Net income per share:		
Basic (1)	$ 0.83	$ 0.65
Diluted (2)	$ 0.82	$ 0.64
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	4	3

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

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

Note 6 – Income Taxes

Income tax expense was $166 million and $187 million for the first quarter of fiscal years 2024 and 2023, respectively. The income tax expense as a percentage of income before income tax was 7.5% and 10.3% for the first quarter of fiscal years 2024 and 2023, respectively.

The decrease in the effective tax rate was primarily due to the tax impact of the Arm acquisition termination cost recorded in the first quarter of fiscal year 2023, which did not result in a tax benefit, and the increased impact of tax benefits from stock-based compensation, partially offset by decreased tax benefits impact from the foreign-derived intangible income deduction and the U.S. federal research tax credit.

Our effective tax rates for the first quarter of fiscal years 2024 and 2023 were lower than the U.S. federal statutory rate of 21% due to tax benefits from the foreign-derived intangible income deduction, stock-based compensation and the U.S. federal research tax credit.

For the first quarter of fiscal year 2024, there were no material changes to our tax years that remain subject to examination by major tax jurisdictions. We are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019. Additionally, there have been no material changes to our unrecognized tax benefits and any related interest or penalties since the fiscal year ended January 29, 2023.

While we believe that we have adequately provided for all uncertain tax positions, or tax positions where we believe it is not more-likely-than-not that the position will be sustained upon review, 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 with the respective tax authorities. As of April 30, 2023, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next 12 months.

Note 7 - 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:

	April 30, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 6,723	$ 4	$ (11)	$ 6,716	$ 2,535	$ 4,181
Debt securities issued by the U.S. Treasury	3,996	2	(31)	3,967	421	3,546
Debt securities issued by U.S. government agencies	2,442	1	(1)	2,442	199	2,243
Money market funds	1,502	—	—	1,502	1,502	—
Certificates of deposit	395	—	—	395	173	222
Foreign government bonds	49	—	—	49	—	49
Total	$ 15,107	$ 7	$ (43)	$ 15,071	$ 4,830	$ 10,241

	January 29, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 4,809	$ —	$ (12)	$ 4,797	$ 1,087	$ 3,710
Debt securities issued by the U.S. Treasury	4,185	1	(44)	4,142	—	4,142
Debt securities issued by U.S. 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

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

	April 30, 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 U.S. Treasury	$ 1,601	$ (11)	$ 1,106	$ (20)	$ 2,707	$ (31)
Debt securities issued by U.S. government agencies	1,259	(1)	—	—	1,259	(1)
Corporate debt securities	945	(4)	838	(7)	1,783	(11)
Total	$ 3,805	$ (16)	$ 1,944	$ (27)	$ 5,749	$ (43)

	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 U.S. 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 U.S. government agencies	1,307	(2)	—	—	1,307	(2)
Total	$ 4,939	$ (30)	$ 1,868	$ (28)	$ 6,807	$ (58)

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 are shown below by contractual maturity.

	April 30, 2023		January 29, 2023	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(In millions)			
Less than one year	$ 12,654	$ 12,625	$ 9,738	$ 9,708
Due in 1 - 5 years	2,453	2,446	3,374	3,347
Total	$ 15,107	$ 15,071	$ 13,112	$ 13,055

Note 8 – 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.

	Pricing Category	Fair Value at	
		April 30, 2023	January 29, 2023
		(In millions)	
Assets			
Cash equivalents and marketable securities:			
Money market funds	Level 1	$ 1,502	$ 1,777
Corporate debt securities	Level 2	$ 6,716	$ 4,797
Debt securities issued by the U.S. Treasury	Level 2	$ 3,967	$ 4,142
Debt securities issued by U.S. government agencies	Level 2	$ 2,442	$ 1,834
Certificates of deposit	Level 2	$ 395	$ 365
Foreign government bonds	Level 2	$ 49	$ 140
Other assets (Investment in non-affiliated entities):			
Publicly-held equity securities (1)	Level 1	$ 9	$ 11
Privately-held equity securities	Level 3	$ 496	$ 288
Liabilities (2)			
0.309% Notes Due 2023	Level 2	$ 1,243	$ 1,230
0.584% Notes Due 2024	Level 2	$ 1,197	$ 1,185
3.20% Notes Due 2026	Level 2	$ 976	$ 966
1.55% Notes Due 2028	Level 2	$ 1,112	$ 1,099
2.85% Notes Due 2030	Level 2	$ 1,375	$ 1,364
2.00% Notes Due 2031	Level 2	$ 1,062	$ 1,044
3.50% Notes Due 2040	Level 2	$ 862	$ 870
3.50% Notes Due 2050	Level 2	$ 1,633	$ 1,637
3.70% Notes Due 2060	Level 2	$ 403	$ 410

(1) Unrealized losses of $14 million and $24 million from investments in publicly-traded equity securities were recorded in other income (expense), net, in the first quarter of fiscal years 2024 and 2023, respectively.

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

Note 9 - Amortizable Intangible Assets and Goodwill

The components of our amortizable intangible assets are as follows:

	April 30, 2023			January 29, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
			(In millions)			
Acquisition-related intangible assets	$ 3,112	$ (1,780)	$ 1,332	$ 3,093	$ (1,614)	$ 1,479
Patents and licensed technology	460	(251)	209	446	(249)	197
Total intangible assets	$ 3,572	$ (2,031)	$ 1,541	$ 3,539	$ (1,863)	$ 1,676

Amortization expense associated with intangible assets was $181 million and $155 million for the first quarter of fiscal years 2024 and 2023, respectively.

The following table outlines the estimated future amortization expense related to the net carrying amount of intangible assets as of April 30, 2023:

	Future Amortization Expense
	(In millions)
Fiscal Year:	
2024 (excluding first quarter)	$ 433
2025	554
2026	259
2027	149
2028	37
2029 and thereafter	109
Total	$ 1,541

In the first quarter of fiscal year 2024, goodwill increased by $58 million from an acquisition, and was assigned to our Compute & Networking segment.

Note 10 - Balance Sheet Components

Certain balance sheet components are as follows:

	April 30, 2023	January 29, 2023
Inventories:	(In millions)	
Raw materials	$ 1,809	$ 2,430
Work in-process	930	466
Finished goods	1,872	2,263
Total inventories	$ 4,611	$ 5,159

Other Assets:	April 30, 2023	January 29, 2023
	(In millions)	
Prepaid supply and capacity agreements	$ 3,002	$ 2,989
Investment in non-affiliated entities	505	299
Prepaid royalties	381	387
Prepaid cloud services	171	23
Other	145	122
Total other assets	$ 4,204	$ 3,820

Accrued and Other Current Liabilities:	April 30, 2023	January 29, 2023
	(In millions)	
Taxes payable	$ 1,544	$ 467
Customer program accruals	1,245	1,196
Excess inventory purchase obligations	786	954
Deferred revenue (1)	367	354
Accrued payroll and related expenses	320	530
Operating leases	187	176
Licenses and royalties	143	149
Product warranty and return provisions	112	108
Other	165	186
Total accrued and other current liabilities	$ 4,869	$ 4,120

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

Other Long-Term Liabilities:	April 30, 2023	January 29, 2023
	(In millions)	
Income tax payable (1)	$ 1,300	$ 1,204
Deferred income tax	290	247
Deferred revenue (2)	230	218
Licenses payable	155	181
Other	62	63
Total other long-term liabilities	$ 2,037	$ 1,913

(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 the first quarter of fiscal years 2024 and 2023:

	April 30, 2023	May 1, 2022
	(In millions)	
Balance at beginning of period	$ 572	$ 502
Deferred revenue additions during the period	287	212
Revenue recognized during the period	(262)	(177)
Balance at end of period	$ 597	$ 537

Revenue allocated to remaining performance obligations, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods, was $639 million as of April 30, 2023. We expect to recognize approximately 46% of this revenue 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.

We also 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 the 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:

	April 30, 2023	January 29, 2023
	(In millions)	
Designated as cash flow hedges	$ 1,142	$ 1,128
Non-designated hedges	$ 350	$ 366

The unrealized gains and losses or fair value of our foreign currency forward contracts was not significant as of April 30, 2023 and January 29, 2023.

As of April 30, 2023, all designated foreign currency forward contracts mature within 18 months. The expected realized gains and losses deferred into accumulated other comprehensive income or loss related to foreign currency forward contracts within the next twelve months was not significant.

During the first quarter of fiscal years 2024 and 2023, 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

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

	Expected Remaining Term (years)	Effective Interest Rate	Carrying Value at April 30, 2023	Carrying Value at January 29, 2023
			(In millions)	
0.309% Notes Due 2023	0.1	0.41%	$ 1,250	$ 1,250
0.584% Notes Due 2024	1.1	0.66%	1,250	1,250
3.20% Notes Due 2026	3.4	3.31%	1,000	1,000
1.55% Notes Due 2028	5.1	1.64%	1,250	1,250
2.85% Notes Due 2030	6.9	2.93%	1,500	1,500
2.00% Notes Due 2031	8.1	2.09%	1,250	1,250
3.50% Notes Due 2040	16.9	3.54%	1,000	1,000
3.50% Notes Due 2050	26.9	3.54%	2,000	2,000
3.70% Notes Due 2060	36.9	3.73%	500	500
Unamortized debt discount and issuance costs			(46)	(47)
Net carrying amount			10,954	10,953
Less short-term portion			(1,250)	(1,250)
Total long-term portion			$ 9,704	$ 9,703

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 April 30, 2023, we were in compliance with the required covenants, which are non-financial in nature, under the outstanding notes.

Commercial Paper

We have a $575 million commercial paper program to support general corporate purposes. As of April 30, 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 and capacity agreements, certain software and technology licenses, other goods and services and long-lived assets.

As of April 30, 2023, we had outstanding inventory purchase and long-term supply and capacity obligations totaling $7.27 billion. During the normal course of business, to manage manufacturing lead times and help ensure adequate supply, we enter into agreements with contract manufacturers that allow them to procure inventory based upon criteria as defined by us, and in certain instances, these agreements allow us the option to cancel, reschedule, and adjust our requirements based on our business needs prior to firm orders being placed, but these changes may result in the payment of costs incurred through the date of cancellation.

Other non-inventory purchase obligations of $3.26 billion include $2.43 billion of multi-year cloud service agreements.

Total future purchase commitments as of April 30, 2023 are as follows:

		Commitments
		(In millions)
Fiscal Year:		
2024 (excluding first quarter)	$	6,667
2025		1,816
2026		753
2027		704
2028		332
2029 and thereafter		255
Total	$	10,527

Accrual for Product Warranty Liabilities

The estimated amount of product warranty liabilities was $77 million and $82 million as of April 30, 2023 and January 29, 2023, respectively. The estimated product returns and estimated product warranty activity consisted of the following:

	Three Months Ended			
	April 30, 2023		May 1, 2022	
	(In millions)			
Balance at beginning of period	$	82	$	46
Additions		13		16
Utilization		(18)		(7)
Balance at end of period	$	77	$	55

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 Condensed 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, 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 April 30, 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.

Note 14 - Shareholders' Equity

Capital Return Program

Since the inception of our share repurchase program through April 30, 2023, we have repurchased an aggregate of 1.10 billion shares for a total cost of $17.12 billion. As of April 30, 2023, we were authorized, subject to certain specifications, to repurchase an additional $7.23 billion of shares through December 2023. We did not repurchase any shares during the first quarter of fiscal year 2024.

During the first quarter of fiscal years 2024 and 2023, we paid $99 million and $100 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.

Note 15 - 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 artificial intelligence, or 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 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, acquisition termination cost, intellectual property related, or IP-related and legal settlement costs, 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.

	Compute & Networking	Graphics	All Other	Consolidated
		(In millions)		
Three Months Ended April 30, 2023				
Revenue	$ 4,460	$ 2,732	$ —	$ 7,192
Operating income (loss)	$ 2,160	$ 1,046	$ (1,066)	$ 2,140
Three Months Ended May 1, 2022				
Revenue	$ 3,672	$ 4,616	$ —	$ 8,288
Operating income (loss)	$ 1,606	$ 2,476	$ (2,214)	$ 1,868

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Reconciling items included in "All Other" category:		
Stock-based compensation expense	$ (735)	$ (578)
Acquisition-related and other costs	(173)	(149)
Unallocated cost of revenue and operating expenses	(154)	(127)
IP-related and legal settlement costs	(8)	(7)
Acquisition termination cost	—	(1,353)
Other	4	—
Total	$ (1,066)	$ (2,214)

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:

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Revenue:		
United States	$ 2,385	$ 1,932
Taiwan	1,796	2,777
China (including Hong Kong)	1,590	2,081
Singapore	762	454
Other countries	659	1,044
Total revenue	$ 7,192	$ 8,288

No customer represented 10% or more of total revenue for the first quarter of fiscal years 2024 and 2023.
Two customers accounted for 12% and 10% of our accounts receivable balance as of April 30, 2023. Two customers accounted for 14% and 11% of our accounts receivable balance as of January 29, 2023.

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Revenue:		
Data Center	$ 4,284	$ 3,750
Gaming	2,240	3,620
Professional Visualization	295	622
Automotive	296	138
OEM and Other	77	158
Total revenue	$ 7,192	$ 8,288

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 in greater detail under the heading "Risk Factors" of such reports. 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 Quarterly Report on Form 10-Q 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.

 The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the risk factors set forth in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 and Part II, Item 1A. "Risk Factors" of this Quarterly Report on Form 10-Q and our Condensed Consolidated Financial Statements and related Notes thereto, as well as other cautionary statements and risks described elsewhere in this Quarterly Report on Form 10-Q and our other filings with the SEC, before deciding to purchase 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, autonomous vehicles, robotics, metaverse and 3D internet applications.

Our two operating segments are "Compute & Networking" and "Graphics," as described in Note 15 of the Notes to Condensed Consolidated Financial Statements.

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 and capacity agreements, has grown significantly due to recent supply chain conditions and long lead times, complexity of our products, and changes in demand. We have entered and expect to continue to enter into supplier and capacity prepayment arrangements. We have procured substantially higher Data Center supply for the second half compared to the first half of fiscal year 2024. We may incur inventory provisions or impairments if our inventory or supply or capacity commitments are misaligned with demand for our products.

Product transitions are complex as we often ship both new and prior 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 prior architectures ahead of new product introductions can create reductions or volatility in our revenue. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, may impair our ability to predict demand and impact our supply mix, and we may incur additional costs.

We build technology and products for use cases and applications that may be new or may not yet exist such as our Omniverse platform, third-party large language models and generative AI 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 significant revenue from these use cases and applications. New technologies such as generative AI models have emerged, and while they have driven increased demand for compute infrastructure, the long-term trajectory is unknown.

NVIDIA AI Cloud Service Offerings

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

We entered and may continue to enter into multi-year cloud service agreements to support these offerings and our research and development activities. The timing and availability of these cloud services has changed and may continue to change, impacting revenue, expenses and development timelines. We also offer or plan to offer standalone software solutions including NVIDIA AI Enterprise, NVIDIA Omniverse, NVIDIA DRIVE, and several other software solutions.

Global Trade

During the third quarter of fiscal year 2023, the U.S. government, or the USG, announced 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. Following the 2022 export controls, we transitioned some operations, including certain testing, validation, and supply and distribution operations out of China and Hong Kong. We have sold alternative products in China not subject to the license requirements, such as our A800 or H800 offerings.

Management of these new license and other requirements is complicated and time consuming. Our results and competitive position may be harmed and we may be effectively excluded from all or part of the China market if there are further changes in the USG's export controls, 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 the USG does not grant licenses in a timely manner or denies licenses to significant customers, or if we incur significant transition costs. Any new control that impacts a wide range of our products would likely have a disproportionate impact on NVIDIA and may disadvantage us against certain of our competitors that sell chips that are outside the scope of such control. In addition to USG export controls, the Chinese government may also impose restrictions that impact our ability to sell our products.

New export controls or changes to existing controls could negatively impact our business, revenue or supply chain. While we work through the resiliency and redundancy of our supply chain, it is currently concentrated in the Asia-Pacific, including China, Hong Kong, Korea and Taiwan, and changes to trade requirements may negatively impact our business.

First Quarter of Fiscal Year 2024 Summary

	Three Months Ended				
	April 30, 2023	January 29, 2023	May 1, 2022	Quarter-over-Quarter Change	Year-over-Year Change
	($ in millions, except per share data)				
Revenue	$ 7,192	$ 6,051	$ 8,288	19 %	(13)%
Gross margin	64.6 %	63.3 %	65.5 %	1.3 pts	(0.9) pts
Operating expenses	$ 2,508	$ 2,576	$ 3,563	(3)%	(30)%
Income from operations	$ 2,140	$ 1,257	$ 1,868	70 %	15 %
Net income	$ 2,043	$ 1,414	$ 1,618	44 %	26 %
Net income per diluted share	$ 0.82	$ 0.57	$ 0.64	44 %	28 %

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 the first quarter of fiscal year 2024 was $7.19 billion, down 13% from a year ago and up 19% sequentially.

Data Center revenue was up 14% from a year ago and up 18% sequentially, led by growing demand for generative AI and large language models using GPUs based on our NVIDIA Hopper and Ampere architectures. The revenue growth reflects strong demand from large consumer internet companies and cloud service providers. Enterprise demand for GPU platforms was strong, although general purpose networking solutions declined both sequentially and from a year ago.

Gaming revenue was down 38% from a year ago and up 22% sequentially. The year-on-year decrease reflects weaker demand due to the macroeconomic slowdown and lower shipments to normalize channel inventory levels. The sequential increase was driven by the ramp of our new GeForce RTX 40 Series GPUs for desktops and laptops based on the Ada Lovelace architecture.

Professional Visualization revenue was down 53% from a year ago and up 31% sequentially. The year-on-year decrease reflects lower sell-in to partners to help reduce channel inventory levels. The sequential increase was driven by higher demand for desktop and mobile workstation GPUs.

Automotive revenue was up 114% from a year ago and up 1% sequentially. The year-on-year increase reflects growth in sales of self-driving platforms and AI cockpit solutions.

OEM and Other revenue was down 51% from a year ago and down 8% sequentially. These decreases were primarily driven by lower entry level notebook GPU sales.

Gross margin declined from a year earlier and increased sequentially. The year-on-year decline reflects lower Gaming margins and a higher contribution from Automotive, partially offset by higher Data Center margins. The sequential increase reflects lower costs in Gaming and higher Data Center margins as we ramp our Hopper architecture.

Operating expenses were down 30% from a year ago and down 3% sequentially. The prior year included a termination charge of $1.35 billion for the proposed Arm acquisition, and the prior quarter included fixed asset write-downs.

Cash, cash equivalents and marketable securities were $15.32 billion, down from $20.34 billion a year ago and up from $13.30 billion a quarter ago. The year-on-year decrease reflects $8.04 billion in stock repurchases, partially offset by operating cash flow generation. The sequential increase reflects operating cash flow generation.

During the first quarter of fiscal year 2024, we returned $99 million to shareholders in the form of cash dividends. As of the end of the first quarter of fiscal year 2024, we had $7.23 billion remaining under our share repurchase authorization through December 2023.

Market Platform Highlights

Data Center revenue for the first quarter of fiscal year 2024 was $4.28 billion, up 14% from a year ago, led by growing demand for generative AI and large language models using GPUs based on our NVIDIA Hopper and Ampere architectures. The year-on-year increase reflects strong demand from large consumer internet customers and cloud service providers. We launched four AI inference platforms that combine our full-stack inference software with NVIDIA Ada, NVIDIA Hopper and NVIDIA Grace Hopper processors optimized for generative AI, large language model and other AI workloads. We announced that Google Cloud is the first cloud provider to offer the new NVIDIA L4 Tensor Core GPU to accelerate generative AI application. We introduced NVIDIA AI Foundations to help businesses create and operate custom large language models and generative AI models. We also partnered with ServiceNow, Inc. to build generative AI across enterprise IT; joined with Dell Technologies in Project Helix to deliver full-stack generative AI solutions to enterprises; announced a collaboration with Medtronic on an AI platform for medical devices; and unveiled the NVIDIA cuLitho software library for computational lithography.

Gaming revenue for the first quarter of fiscal year 2024 was $2.24 billion, down 38% from a year ago. The year-on-year decrease reflects weaker demand due to the macroeconomic slowdown and lower shipments to normalize channel inventory levels. We launched the GeForce RTX 4070 GPU based on the NVIDIA Ada Lovelace architecture.

Professional Visualization revenue for the first quarter of fiscal year 2024 was $295 million, down 53% from a year ago, on lower sell-in to partners to help reduce channel inventory levels. We announced six new GPUs based on the NVIDIA RTX Ada Lovelace architecture. We announced NVIDIA Omniverse Cloud, a fully managed service running in Microsoft Azure, for the development and deployment of industrial metaverse applications, and expanded our collaboration with Microsoft to connect Microsoft 365 applications with NVIDIA Omniverse.

Automotive revenue for the first quarter of fiscal year 2024 was $296 million, up 114% from a year ago on growth in sales of self-driving platforms and AI cockpit solutions. We announced that electric vehicle maker BYD Auto Co. Ltd. will extend its use of the NVIDIA DRIVE Orin centralized compute platform across more of its fleet.

Financial Information by Business Segment and Geographic Data

Refer to Note 15 of the Notes to Condensed Consolidated Financial Statements for disclosure regarding segment information.

Critical Accounting Policies and Estimates

Refer to Part II, Item 7, "Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. There have been no material changes to our Critical Accounting Policies and Estimates.

Results of Operations

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

	Three Months Ended	
	April 30, 2023	May 1, 2022
Revenue	100.0 %	100.0 %
Cost of revenue	35.4	34.5
Gross profit	64.6	65.5
Operating expenses		
Research and development	26.1	19.5
Sales, general and administrative	8.8	7.1
Acquisition termination cost	—	16.3
Total operating expenses	34.9	42.9
Income from operations	29.7	22.6
Interest income	2.1	0.2
Interest expense	(0.9)	(0.8)
Other, net	(0.2)	(0.2)
Other income (expense), net	1.0	(0.8)
Income before income tax	30.7	21.8
Income tax expense	2.3	2.3
Net income	28.4 %	19.5 %

Revenue

Revenue by Reportable Segments

	Three Months Ended			
	April 30, 2023	May 1, 2022	$ Change	% Change
		($ in millions)		
Compute & Networking	$ 4,460	$ 3,672	$ 788	21 %
Graphics	2,732	4,616	(1,884)	(41)%
Total	$ 7,192	$ 8,288	$ (1,096)	(13)%

Compute & Networking - The year-on-year increase was led by growing demand for generative AI and large language models using GPUs based on our Hopper and Ampere architectures. The revenue growth reflects strong demand from large consumer internet companies and cloud service providers. Enterprise demand for GPU platforms was strong, although general purpose networking solutions declined from a year ago. Self-driving platforms and AI cockpit solutions revenue also increased from a year ago.

Graphics - The year-on-year decrease primarily reflects weaker Gaming demand due to the macroeconomic slowdown and lower shipments to normalize channel inventory levels, and lower Professional Visualization sell-in to partners to help reduce channel inventory levels.

Concentration of Revenue

Revenue from sales to customers outside of the United States accounted for 67% and 77% of total revenue for the first quarter of fiscal years 2024 and 2023, respectively. 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 direct customer represented 10% or more of total revenue for the first quarter of fiscal years 2024 and 2023. However, our estimated Compute & Networking end customer demand is concentrated among a few large cloud service providers and consumer internet companies. Some of these large companies do not purchase directly from us but often purchase through several system builders and channel partners. We expect this trend will continue.

Gross Margin

Our overall gross margin decreased to 64.6% for the first quarter of fiscal year 2024 from 65.5% for the first quarter of fiscal year 2023, reflecting lower margins of GeForce GPUs within our Graphics segment partially offset by higher margins and increased contribution from compute products within our Compute & Networking segment.

Reserves for inventory and excess inventory purchase obligations totaled $134 million and $90 million for the first quarter of fiscal years 2024 and 2023, respectively. Sales of inventory that was previously written-off or down, or settlements of excess inventory purchase obligations, totaled $50 million and $15 million for the first quarter of fiscal years 2024 and 2023, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 1.2% and 0.9% in the first quarter of fiscal years 2024 and 2023, respectively.

Compute & Networking - Segment gross margin increased during the first quarter of fiscal year 2024 compared to the first quarter of fiscal year 2023, primarily due to higher margins and increased contribution from compute products.

Graphics - Segment gross margin decreased during the first quarter of fiscal year 2024 compared to the first quarter of fiscal year 2023 primarily due to lower margins of GeForce GPUs.

Operating Expenses

	Three Months Ended			
	April 30, 2023	**May 1, 2022**	**$ Change**	**% Change**
	($ in millions)			
Research and development expenses	$ 1,875	$ 1,618	$ 257	16 %
% of net revenue	*26 %*	*20 %*		
Sales, general and administrative expenses	633	592	41	7 %
% of net revenue	*9 %*	*7 %*		
Acquisition termination cost	—	1,353	(1,353)	— %
% of net revenue	*— %*	*16 %*		
Total operating expenses	$ 2,508	$ 3,563	$ (1,055)	(30)%
% of net revenue	*34.9 %*	*42.9 %*		

The increases in research and development expense and sales, general and administrative expense for the first quarter of fiscal year 2024 were primarily driven by employee growth and associated compensation and benefits.

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

	Three Months Ended			
	April 30, 2023	May 1, 2022	$ Change	% Change
	($ in millions)			
Interest income	$ 150	$ 18	$ 132	733 %
Interest expense	(66)	(68)	2	(3)%
Other, net	(15)	(13)	(2)	15 %
Other income (expense), net	$ 69	$ (63)	$ 132	(210)%

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.

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.

Income Taxes

Income tax expense was $166 million and $187 million for the first quarter of fiscal years 2024 and 2023, respectively. The income tax expense as a percentage of income before income tax was 7.5% and 10.3% for the first quarter of fiscal years 2024 and 2023, respectively.

The decrease in the effective tax rate was primarily due to the tax impact of the Arm acquisition termination cost recorded in the first quarter of fiscal year 2023, which did not result in a tax benefit, and the increased impact of tax benefits from stock-based compensation, partially offset by decreased tax benefits impact from the foreign-derived intangible income deduction and the U.S. federal research tax credit.

Liquidity and Capital Resources

	April 30, 2023	January 29, 2023
	(In millions)	
Cash and cash equivalents	$ 5,079	$ 3,389
Marketable securities	10,241	9,907
Cash, cash equivalents and marketable securities	$ 15,320	$ 13,296

	Three Months Ended	
	April 30, 2023	May 1, 2022
	(In millions)	
Net cash provided by operating activities	$ 2,911	$ 1,731
Net cash provided by (used in) investing activities	$ (841)	$ 2,612
Net cash used in financing activities	$ (380)	$ (2,446)

As of April 30, 2023, we had $15.32 billion in cash, cash equivalents and marketable securities, an increase of $2.02 billion from the end of fiscal year 2023. 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 increased in the first quarter of fiscal year 2024 compared to the first quarter of fiscal year 2023, primarily due to lower inventory prepayments and changes in inventory, partially offset by lower revenue.

Cash used in investing activities increased in the first quarter of fiscal year 2024 compared to the first quarter of fiscal year 2023, primarily driven by lower marketable securities sales and maturities, partially offset by lower purchases of marketable securities.

Cash used in financing activities decreased in the first quarter of fiscal year 2024 compared to the first quarter of fiscal year 2023, which primarily reflects share repurchases in the first quarter of fiscal year 2023.

Liquidity

Our primary sources of liquidity are our cash and cash equivalents, our marketable securities, and the cash generated by our operations. As of April 30, 2023, we had $15.32 billion in cash, cash equivalents, and marketable securities. Our marketable securities consist of debt securities issued by the USG 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 7 of the Notes to Condensed Consolidated Financial Statements for additional information. 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 potential supplier and service provider prepayments. We continuously evaluate our liquidity and capital resources, including our access to external capital, to ensure we can finance future capital requirements.

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. as of April 30, 2023 are available for use in the U.S. without incurring additional U.S. federal income taxes. We have deferred our federal income tax payments until October 2023 due to the disaster relief made available by the Internal Revenue Service.

During the first quarter of fiscal year 2024, we filed a Form S-3 shelf registration statement to replace the existing shelf that was expiring. We do not have any immediate plans to utilize this shelf once effective.

Capital Return to Shareholders

During the first quarter of fiscal year 2024, we returned $99 million in cash dividends. Our cash dividend program and the payment of future cash dividends under that program are subject to the continuing determination by our Board of Directors that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

We did not repurchase any shares during the first quarter of fiscal year 2024. As of April 30, 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

Our aggregate debt maturities as of April 30, 2023, by year payable, are as follows:

	April 30, 2023
	(In millions)
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	(46)
Net carrying amount	10,954
Less short-term portion	(1,250)
Total long-term portion	$ 9,704

We expect to repay $1.25 billion of debt due in the second quarter of fiscal year 2024.

We have a $575 million commercial paper program to support general corporate purposes. As of April 30, 2023, we had not issued any commercial paper.

Material Cash Requirements and Other Obligations

We have unrecognized tax benefits of $1.11 billion, which includes related interest and penalties of $109 million recorded in non-current income tax payable as of April 30, 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 6 of the Notes to Condensed Consolidated Financial Statements for further information.

Other than the contractual obligations described above, there were no material changes outside the ordinary course of business in our contractual obligations from those disclosed in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. Refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a description of our contractual obligations. For a description of our operating lease obligations, long-term debt, and purchase obligations, refer to Note 3, Note 12, and Note 13 of the Notes to Condensed Consolidated Financial Statements, respectively.

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

There has been no adoption of any new and recently issued accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Investment and Interest Rate Risk

Financial market risks related to investment and interest rate risk are described in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of April 30, 2023, there have been no material changes to the financial market risks described as of January 29, 2023.

Foreign Exchange Rate Risk

The impact of foreign currency transactions related to foreign exchange rate risk is described in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of April 30, 2023, there have been no material changes to the foreign exchange rate risks described as of January 29, 2023.

ITEM 4. CONTROLS AND PROCEDURES

Controls and Procedures

Disclosure Controls and Procedures

Based on their evaluation as of April 30, 2023, our management, including our Chief Executive Officer and Chief Financial Officer, has concluded that our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) were effective to provide reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes that occurred during the first quarter of fiscal year 2024 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. 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.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Part I, Item 1, Note 13 of the Notes to Condensed Consolidated Financial Statements for a discussion of significant developments in our legal proceedings since January 29, 2023. Also refer to Item 3, “Legal Proceedings” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a prior discussion of our legal proceedings.

ITEM 1A. RISK FACTORS

Other than the risk factors listed below, there have been no material changes from the risk factors previously described under Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Purchasing or owning NVIDIA common stock involves investment risks including, but not limited to, the risks described in Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, and below. Additionally, any one of those risks could harm our business, financial condition and results of operations or reputation, which could cause our stock price to decline. 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.

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 and maintain 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 or acquire 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, security, reliability expectations, 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, operational, compliance, sales and marketing investments for the above activities.

We have invested 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 offer enterprise customers NVIDIA AI cloud services directly and through our network of partners. Examples of these services include NVIDIA DGX Cloud, which includes cloud-based infrastructure and software for training and deploying AI models, and NVIDIA AI Foundations for customizable pretrained AI models. We have partnered with cloud service providers to host these services in their data centers, and we entered and may continue to enter into multi-year cloud service agreements to support these offerings and our research and development activities. The timing and availability of these cloud services has changed and may continue to change, impacting revenue, expenses and development timelines. 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 including NVIDIA AI Enterprise, NVIDIA Omniverse, NVIDIA DRIVE, 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 services. We may incur significant costs and may not achieve any significant revenue from these offerings.

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.

Many additional factors 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 global or local health issues;
- rapidly changing technology or customer requirements;
- time to market;
- 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;
- changes that impact the ecosystem for the architectures underlying our products and technologies;
- the demand for our products relating to 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 and capacity agreements, has grown significantly due to recent supply chain conditions and long lead times, complexity of our products, and changes in demand. We have entered and expect to continue to enter into supplier and capacity prepayment arrangements. We have procured substantially higher Data Center supply for the second half compared to the first half of fiscal year 2024. We may incur inventory provisions or impairments if our inventory or supply and capacity 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 can negatively impact our revenue as we often ship both new and prior 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 prior 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. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, and we may incur additional costs.

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. Additionally, since some of our products are part of a complex data center buildout, supply constraints or availability issues with respect to any one component have had and may have a broader revenue impact.

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. 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, such as our Omniverse platform, third-party large language models and generative AI 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 significant revenue from these use cases and applications. New technologies such as generative AI models have emerged, and while they have driven increased demand for compute infrastructure, the long--term trajectory is unknown. Because our products may be used in multiple use cases and applications, it is difficult for us to estimate with any reasonable degree of precision the impact of generative AI models on our reported revenue or forecasted demand.

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. 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 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, several years ago, our Gaming GPUs began to be used for mining digital currencies 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 Ethereum 2.0 merge in 2022, have reduced and may in the future decrease the usage of GPUs for Ethereum mining. This has created and may in the future 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. Following the Ethereum 2.0 merge, NVIDIA Ampere and Ada Lovelace GPU architectures no longer include LHR. In general, 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, customers, and other third parties to build, enhance, and maintain 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, customers, and other third parties to build, enhance, and maintain 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.

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 and the banking system, 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, cloud service providers, data center providers, licensing parties, or other third parties we rely on; 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. Adverse developments affecting financial institutions, such as bank failures, or concerns or speculation about similar events or risks, could lead to market-wide liquidity problems and other disruptions, which could impact our customers' ability to fulfill their payment obligations to us, our vendors' ability to fulfill their contractual obligations to us, or our ability to fulfill our own obligations.

Additionally, we maintain an investment portfolio of various holdings, types, and maturities. These investments are subject to general credit, liquidity, market, and interest rate risks, which may be exacerbated by market downturns or events that affect global financial markets as described above. A majority of our investment portfolio comprises U.S. government securities. A decline in global financial markets for long periods or a downgrade of the U.S. government credit rating due to an actual or threatened default on government debt could result in higher interest rates, a decline in the value of the U.S. dollar, reduced market liquidity, or other adverse conditions. These factors could cause an unrealized or realized loss position in our investments or require us to record impairment charges.

Product, system security, and data protection breaches, as well as cyber-attacks, have the potential to disrupt our operations, reduce our expected revenue, increase our expenses, and significantly harm our business and 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.

Individuals, groups of hackers and sophisticated organizations, including nation-states and nation-state-supported actors, and other threat actors now engage and are expected to continue to engage in cyber-attacks. Additionally, some actors are using AI technology to launch more automated, targeted and coordinated attacks. Due to 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. We may also face cybersecurity threats due to error or intentional misconduct by employees, contractors, or other third-party service providers. 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. We may also incorporate third party data into our AI algorithms or use open-source datasets to train our algorithms; these datasets may be flawed, insufficient, or contain certain biased information. We may have limited insight into the data privacy or security practices of third-party data suppliers for our AI algorithms. Our ability to monitor these third parties' information security practices is limited, and they 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, including training programs and security awareness initiatives, to 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 invest in training programs and security awareness initiatives and take steps to detect and remediate certain vulnerabilities that we have identified, we may not always be able to prevent threats or 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, sensitive, personal, 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 proprietary 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. In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive information about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to harm our business.

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, supplier disruptions, terrorist attacks, or acts of violence, political and/or civil unrest, acts of war or other military actions, epidemics or pandemics, abrupt regulatory deterioration, 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.

Additionally, interruptions or delays in services from cloud service providers, data center co-location partners, and other third parties on which we rely for any reason, including the events described above or other events such as the insolvency of these parties, could impair our ability to provide our products and services and harm our business. As we increase our reliance on these third-party systems and services, our exposure to damage from service interruptions, defects, disruptions, outages and other performance and quality problems may increase.

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 relating to carbon taxes, fuel or energy taxes, and pollution limits, such as proposed SEC rules and the EU Corporate Sustainability Reporting Directive, 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, other compliance costs, as well as greater indirect costs resulting from our customers and/or suppliers 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 goals to source 100% of our global electricity use from renewable energy by the end of fiscal year 2025 and annually thereafter and to engage manufacturing suppliers comprising at least 67% of our scope 3 category 1 greenhouse gas emissions with the goal of effecting supplier adoption of science-based targets aligned with limiting temperature rise to 1.5 degrees Celsius by the end of fiscal year 2026, which could harm our reputation, or we may incur additional, unexpected costs to achieve such goals. 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. Our business could be negatively impacted by decreased demand for computationally powerful but energy intensive products, such as our GPUs, despite their energy efficient design and operation, and/or by increased consumer or customer expectations around the energy efficiency of our products.

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 generally cancel, change or delay product purchase commitments with little 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. Our estimated Compute & Networking end customer demand is concentrated among a few large cloud service providers and consumer internet companies. Some of these large companies do not purchase directly from us but often purchase through several system builders and channel partners. We expect this trend will continue. If end demand increases or our finished goods supply availability is concentrated near a quarter end, the system builders and channel partners may have limited ability to increase their credit, which could impact the timing and amount of our revenue. 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.

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 contractual obligations to customers;
- our extended payment term arrangements with certain customers, the inability of some customers to make required payments, our ability to obtain credit insurance for customers with 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 of the factors discussed above could prevent us from achieving our anticipated 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. In addition, the timing of our operating expenses and investments may lag our revenue growth, creating volatility or periods where current profitability may not be sustainable. 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.

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 antitrust 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 and restrictions on the activities of U.S. persons, 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 risks and 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.

Concerns regarding third-party use of AI for purposes contrary to local governmental interests, including concerns relating to the misuse of AI applications, models, and solutions, could result in unilateral or multilateral restrictions on products that can be used for training, refining, and deploying large language models. Such restrictions could limit the ability of downstream customers and users worldwide to acquire, deploy, and use systems that include our products, software, and services, and negatively impact our business and financial results.

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. Potential export controls targeting GPUs and semiconductors associated with AI may also subject downstream users of our products to additional restrictions on the use, resale, repair, or transfer of our products, negatively impacting our business and financial results. Controls could negatively impact our cost and/or ability to provide services such as NVIDIA AI cloud services and could impact the cost and/or ability of our cloud customers to provide services to their end customers, even outside China.

Export controls could disrupt our supply chain and distribution channels even for our gaming products, negatively impacting our ability to serve demand, even in markets outside China. Even the possibility of additional export controls may negatively impact demand for our products, benefitting competitors that offer alternatives less likely to be restricted by further controls. Repeated changes in the export control rules are likely to impose compliance burdens on our business and our customers, negatively and materially impacting our business.

Increasing use of economic sanctions and export controls 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 USG announced 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. The 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.

Following the 2022 export controls, we transitioned some operations, including certain testing, validation, and supply and distribution operations out of China and Hong Kong. Any future transitions 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 sold alternative products in China not subject to the license requirements, such as our A800 or H800 offerings. To the extent that a customer requires products covered by the 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 requirements 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 there are further changes in the USG's export controls, 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. Given the increasing strategic importance of AI and rising geopolitical tensions, the USG may unilaterally change the export control rules at any time and subject a wide range of our products, including but not limited to A800, H800, and gaming products such as RTX 4090, to export restrictions and licensing requirements, negatively impacting our business and financial results. In the event of such change, we may be unable to sell our inventory of such products and may be unable to develop replacement products not subject to the license requirements, effectively excluding us from all or part of the China market. For example, the USG has been under pressure from some commentators to impose strict conditions for export, such as requirements that every GPU above a certain capability include tamper-proof means to automatically detect the configuration and use of a system as well as an “auto-kill” or “auto-throttle” mechanism that would disable or impair GPUs if certain system or use conditions are detected. Such restrictions would be infeasible, and if imposed by the USG, would be tantamount to a blanket export control on products exceeding the thresholds. Export controls restricting our gaming products, such as RTX 4090, may disrupt a significant portion of our supply and distribution chain and negatively impact sales of such products to markets outside China, including the U.S. and Europe. Export controls may disrupt our supply and distribution chain for a substantial portion of our products, which are warehoused in and distributed from Hong Kong. Export controls restricting our ability to sell datacenter GPUs may also negatively impact demand for our networking products used in servers containing our GPUs. Any new control that impacts a wide range of our products, including but not limited to A800, H800, and RTX4090 would likely have a disproportionate impact on NVIDIA and may disadvantage us against certain of our competitors that sell chips that are outside the scope of such control. Excessive or shifting export controls may also encourage customers outside China to “design-out” U.S. semiconductors from their products to reduce the compliance burden and risk, and to ensure that they are able to serve markets worldwide. As a result, excessive or shifting export controls may negatively impact demand for our products and services not only in China, but also in other markets, such as Europe, Latin America, and Southeast Asia. Excessive or shifting export controls increase the risk of investing in U.S. advanced semiconductor products, because by the time a new product is ready for market, it may be subject to new unilateral export controls restricting its sale. At the same time, such controls may increase investment in foreign competitors, which would be less likely to be restricted by U.S. controls.

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. The Chinese government may impose restrictions on the sale to certain end customers of our products, or any products containing components made by our partners and suppliers. For example, the Chinese government recently announced restrictions relating to certain sales of products containing certain products made by Micron, a supplier of ours. Further restrictions on our products or the products of our suppliers could negatively impact our business and financial results.

Finally, our business depends on our ability to receive consistent and reliable supply from our overseas partners, especially in Taiwan. Any new restrictions that negatively impact our ability to receive supply of components, parts, or services from Taiwan, would negatively impact our business and financial results.

Issues relating to the responsible use of our technologies, including AI in our offerings, may result in reputational or 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 or 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 and we also offer stand-alone AI applications. 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. Complying with multiple regulations from different jurisdictions related to AI could increase our cost of doing business or may change the way that we operate in certain jurisdictions. Compliance with government regulation in the area of AI use and 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

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 April 30, 2023. As of April 30, 2023, we are authorized, subject to certain specifications, to repurchase shares of our common stock up to $7.23 billion through December 2023. We did not repurchase any shares during the first quarter of fiscal year 2024.

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 the first quarter of fiscal year 2024, we paid $99 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.

Restricted Stock Unit Share Withholding

We also 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 the first quarter of fiscal year 2024, we withheld approximately 2 million shares for a total value of $507 million.

Recent Sales of Unregistered Securities and Use of Proceeds

On February 9, 2023, we issued a total of 74,840 shares of our common stock as consideration in connection with an acquisition in a private transaction exempt from the registration requirements of the Securities Act of 1933, as amended, or the Securities Act, pursuant to Section 4(a)(2) of the Securities Act and Regulation D promulgated under the Securities Act.

ITEM 6. EXHIBITS

Exhibit No.	Exhibit Description	Schedule /Form	File Number	Exhibit	Filing Date
3.1	Bylaws of NVIDIA Corporation, Amended and Restated as of March 2, 2023	8-K	000-23985	3.1	3/8/2023
10.1+	Variable Compensation Plan - Fiscal Year 2024	8-K	000-23985	10.1	3/8/2023
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*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document				
101.PRE*	Inline 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.				

+ Management contract or compensatory plan or arrangement.

* Filed herewith.

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 Quarterly Report on Form 10-Q 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.

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.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 26, 2023

NVIDIA Corporation

By: /s/ Colette M. Kress

Colette M. Kress

Executive Vice President and Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION

I, Jen-Hsun Huang, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 26, 2023

/s/JEN-HSUN HUANG
Jen-Hsun Huang
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Colette M. Kress, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 26, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Jen-Hsun Huang, the President and Chief Executive Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended April 30, 2023, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: May 26, 2023

/s/JEN-HSUN HUANG

Jen-Hsun Huang
President and Chief Executive Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

EXHIBIT 32.2

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Colette M. Kress, the Executive Vice President and Chief Financial Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of her knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended April 30, 2023, to which this Certification is attached as Exhibit 32.2 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: May 26, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

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

FORM 10-Q

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

For the quarterly period ended July 30, 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	**94-3177549**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2788 San Tomas Expressway, Santa Clara, California	**95051**
(Address of principal executive offices)	**(Zip Code)**

(408) 486-2000
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year if changed since last report)

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

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of common stock, $0.001 par value, outstanding as of August 18, 2023, was 2.47 billion.

NVIDIA CORPORATION
FORM 10-Q
FOR THE QUARTER ENDED JULY 30, 2023

TABLE OF CONTENTS

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 Company Blog (http://blogs.nvidia.com)

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

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

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

NVIDIA Twitter Account (https://twitter.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 Quarterly Report on Form 10-Q. These channels may be updated from time to time on NVIDIA's investor relations website.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

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

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Revenue	$ 13,507	$ 6,704	$ 20,699	$ 14,992
Cost of revenue	4,045	3,789	6,589	6,646
Gross profit	9,462	2,915	14,110	8,346
Operating expenses				
Research and development	2,040	1,824	3,916	3,443
Sales, general and administrative	622	592	1,253	1,183
Acquisition termination cost	—	—	—	1,353
Total operating expenses	2,662	2,416	5,169	5,979
Operating income	6,800	499	8,941	2,367
Interest income	187	46	338	64
Interest expense	(65)	(65)	(131)	(132)
Other, net	59	(5)	42	(19)
Other income (expense), net	181	(24)	249	(87)
Income before income tax	6,981	475	9,190	2,280
Income tax expense (benefit)	793	(181)	958	6
Net income	$ 6,188	$ 656	$ 8,232	$ 2,274
Net income per share:				
Basic	$ 2.50	$ 0.26	$ 3.33	$ 0.91
Diluted	$ 2.48	$ 0.26	$ 3.30	$ 0.90
Weighted average shares used in per share computation:				
Basic	2,473	2,495	2,472	2,500
Diluted	2,499	2,516	2,495	2,526

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Net income	$ 6,188	$ 656	$ 8,232	$ 2,274
Other comprehensive loss, net of tax				
Available-for-sale securities:				
Net change in realized gain (loss)	(11)	(12)	7	(35)
Reclassification adjustments for net realized gain included in net income	—	1	—	1
Net change in unrealized gain (loss)	(11)	(11)	7	(34)
Cash flow hedges:				
Net unrealized gain (loss)	22	(2)	8	(30)
Reclassification adjustments for net realized loss included in net income	(12)	(13)	(23)	(15)
Net change in unrealized gain (loss)	10	(15)	(15)	(45)
Other comprehensive loss, net of tax	(1)	(26)	(8)	(79)
Total comprehensive income	$ 6,187	$ 630	$ 8,224	$ 2,195

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In millions)
(Unaudited)

	July 30, 2023	January 29, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,783	$ 3,389
Marketable securities	10,240	9,907
Accounts receivable, net	7,066	3,827
Inventories	4,319	5,159
Prepaid expenses and other current assets	1,389	791
Total current assets	28,797	23,073
Property and equipment, net	3,799	3,807
Operating lease assets	1,235	1,038
Goodwill	4,430	4,372
Intangible assets, net	1,395	1,676
Deferred income tax assets	5,398	3,396
Other assets	4,501	3,820
Total assets	$ 49,555	$ 41,182
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,929	$ 1,193
Accrued and other current liabilities	7,156	4,120
Short-term debt	1,249	1,250
Total current liabilities	10,334	6,563
Long-term debt	8,456	9,703
Long-term operating lease liabilities	1,041	902
Other long-term liabilities	2,223	1,913
Total liabilities	22,054	19,081
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock	—	—
Common stock	2	2
Additional paid-in capital	12,629	11,971
Accumulated other comprehensive loss	(51)	(43)
Retained earnings	14,921	10,171
Total shareholders' equity	27,501	22,101
Total liabilities and shareholders' equity	$ 49,555	$ 41,182

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED JULY 30, 2023 AND JULY 31, 2022
(Unaudited)

	Common Stock Outstanding					
(In millions, except per share data)	**Shares**	**Amount**	**Additional Paid-in Capital**	**Accumulated Other Comprehensive Loss**	**Retained Earnings**	**Total Shareholders' Equity**
Balances, April 30, 2023	2,473	$ 2	$ 12,453	$ (50)	$ 12,115	$ 24,520
Net income	—	—	—	—	6,188	6,188
Other comprehensive loss	—	—	—	(1)	—	(1)
Issuance of common stock from stock plans	5	—	1	—	—	1
Tax withholding related to vesting of restricted stock units	(1)	—	(672)	—	—	(672)
Shares repurchased	(8)	—	(1)	—	(3,283)	(3,284)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(99)	(99)
Stock-based compensation	—	—	848	—	—	848
Balances, July 30, 2023	2,469	$ 2	$ 12,629	$ (51)	$ 14,921	$ 27,501
Balances, May 1, 2022	2,504	$ 3	$ 10,623	$ (64)	$ 15,758	$ 26,320
Net income	—	—	—	—	656	656
Other comprehensive loss	—	—	—	(26)	—	(26)
Issuance of common stock from stock plans	6	—	1	—	—	1
Tax withholding related to vesting of restricted stock units	(2)	—	(299)	—	—	(299)
Shares repurchased	(19)	(1)	(1)	—	(3,343)	(3,345)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(100)	(100)
Stock-based compensation	—	—	644	—	—	644
Balances, July 31, 2022	2,489	$ 2	$ 10,968	$ (90)	$ 12,971	$ 23,851

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE SIX MONTHS ENDED JULY 30, 2023 AND JULY 31, 2022
(Unaudited)

(In millions, except per share data)	Common Stock Outstanding Shares	Common Stock Outstanding Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity
Balances, January 29, 2023	2,466	$ 2	$ 11,971	$ (43)	$ 10,171	$ 22,101
Net income	—	—	—	—	8,232	8,232
Other comprehensive loss	—	—	—	(8)	—	(8)
Issuance of common stock from stock plans	14	—	247	—	—	247
Tax withholding related to vesting of restricted stock units	(3)	—	(1,179)	—	—	(1,179)
Shares repurchased	(8)	—	(1)	—	(3,283)	(3,284)
Cash dividends declared and paid ($0.08 per common share)	—	—	—	—	(199)	(199)
Stock-based compensation	—	—	1,591	—	—	1,591
Balances, July 30, 2023	2,469	$ 2	$ 12,629	$ (51)	$ 14,921	$ 27,501
Balances, January 30, 2022	2,506	$ 3	$ 10,385	$ (11)	$ 16,235	$ 26,612
Net income	—	—	—	—	2,274	2,274
Other comprehensive loss	—	—	—	(79)	—	(79)
Issuance of common stock from stock plans	15	—	205	—	—	205
Tax withholding related to vesting of restricted stock units	(4)	—	(837)	—	—	(837)
Shares repurchased	(28)	(1)	(2)	—	(5,338)	(5,341)
Cash dividends declared and paid ($0.08 per common share)	—	—	—	—	(200)	(200)
Stock-based compensation	—	—	1,217	—	—	1,217
Balances, July 31, 2022	2,489	$ 2	$ 10,968	$ (90)	$ 12,971	$ 23,851

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Six Months Ended	
	July 30, 2023	July 31, 2022
Cash flows from operating activities:		
Net income	$ 8,232	$ 2,274
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	1,576	1,226
Depreciation and amortization	749	712
(Gains) losses on investments in non-affiliates, net	(45)	24
Deferred income taxes	(1,881)	(985)
Acquisition termination cost	—	1,353
Other	(102)	18
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(3,239)	(668)
Inventories	861	(1,285)
Prepaid expenses and other assets	(592)	(1,554)
Accounts payable	789	559
Accrued and other current liabilities	2,675	1,267
Other long-term liabilities	236	60
Net cash provided by operating activities	9,259	3,001
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	5,111	10,983
Proceeds from sales of marketable securities	—	1,731
Purchases of marketable securities	(5,343)	(7,576)
Purchases related to property and equipment and intangible assets	(537)	(794)
Acquisitions, net of cash acquired	(83)	(49)
Investments and other, net	(435)	(65)
Net cash provided by (used in) investing activities	(1,287)	4,230
Cash flows from financing activities:		
Proceeds related to employee stock plans	247	205
Payments related to repurchases of common stock	(3,067)	(5,341)
Repayment of debt	(1,250)	—
Payments related to tax on restricted stock units	(1,179)	(837)
Dividends paid	(199)	(200)
Principal payments on property and equipment and intangible assets	(31)	(36)
Other	—	1
Net cash used in financing activities	(5,479)	(6,208)
Change in cash, cash equivalents, and restricted cash	2,493	1,023
Cash, cash equivalents, and restricted cash at beginning of period	3,389	1,990
Cash, cash equivalents, and restricted cash at end of period	$ 5,882	$ 3,013
Reconciliation of cash, cash equivalents, and restricted cash to the Condensed Consolidated Balance Sheet:		
Cash and cash equivalents	$ 5,783	$ 3,013
Restricted cash, included in prepaid expenses and other current assets	99	—
Total cash, cash equivalents, and restricted cash	$ 5,882	$ 3,013
Supplemental disclosure of cash flow information:		
Cash paid for income taxes, net	$ 328	$ 1,108

See accompanying Notes to Condensed Consolidated Financial Statements.

Note 1 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Securities and Exchange Commission, or SEC, Regulation S-X. The January 29, 2023 consolidated balance sheet was derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, as filed with the SEC, but does not include all disclosures required by U.S. GAAP. In the opinion of management, all adjustments, consisting only of normal recurring adjustments considered necessary for a fair statement of results of operations and financial position, have been included. The results for the interim periods presented are not necessarily indicative of the results expected for any future period. The following information should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Significant Accounting Policies

There have been no material changes to our significant accounting policies disclosed in Note 1 - Organization and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal years 2024 and 2023 are both 52-week years. The second quarters of fiscal years 2024 and 2023 were both 13-week quarters.

Reclassifications

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

Principles of Consolidation

Our condensed 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, property, plant, and equipment, and other contingencies. 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 our server, storage, and network equipment from three to a range of four to five years, and our 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, the effect of this change in estimate for the three months ended July 30, 2023 was a benefit of $5 million and $28 million for cost of revenue and operating expenses, respectively, which resulted in an increase in operating income of $33 million and net income of $27 million after tax, or $0.01 per both basic and diluted share. The effect of this change in estimate for the first half of fiscal year 2024 was a benefit of $7 million and $59 million for cost of revenue and operating expenses, respectively, which resulted in an increase in operating income of $66 million and net income of $55 million after tax, or $0.02 per both basic and diluted share.

Note 2 - Business Combination

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 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.

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 July 30, 2023 are as follows:

	Operating Lease Obligations
	(In millions)
Fiscal Year:	
2024 (excluding first half of fiscal year 2024)	$ 134
2025	249
2026	227
2027	211
2028	191
2029 and thereafter	415
Total	1,427
Less imputed interest	178
Present value of net future minimum lease payments	1,249
Less short-term operating lease liabilities	208
Long-term operating lease liabilities	$ 1,041

In addition, we have operating leases, primarily for our data centers, that are expected to commence between the third quarter of fiscal year 2024 and the end of fiscal year 2025 with lease terms of 3 to 8 years for $205 million.

Operating lease expenses were $67 million and $47 million for the second quarter of fiscal years 2024 and 2023, respectively, and $126 million and $90 million for the first half of fiscal years 2024 and 2023, respectively. Short-term and variable lease expenses for the second quarter and first half of fiscal years 2024 and 2023 were not significant.

Other information related to leases was as follows:

	Six Months Ended	
	July 30, 2023	July 31, 2022
	(In millions)	
Supplemental cash flows information		
Operating cash flows used for operating leases	$ 135	$ 91
Operating lease assets obtained in exchange for lease obligations	$ 299	$ 98

As of July 30, 2023, our operating leases had a weighted average remaining lease term of 6.5 years and a weighted average discount rate of 3.47%. 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%.

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 employee stock purchase plan, or ESPP.

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

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
		(In millions)		
Cost of revenue	$ 31	$ 38	$ 58	$ 76
Research and development	600	452	1,124	836
Sales, general and administrative	211	159	394	315
Total	$ 842	$ 649	$ 1,576	$ 1,227

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 Per Share
	(In millions, except per share data)	
Balances, January 29, 2023	45	$ 158.45
Granted	13	$ 359.70
Vested restricted stock	(11)	$ 127.12
Canceled and forfeited	(1)	$ 194.70
Balances, July 30, 2023	46	$ 219.47

As of July 30, 2023, there was $9.69 billion of aggregate unearned stock-based compensation expense. This amount is expected to be recognized over a weighted average period of 2.7 years for RSUs, PSUs, and market-based PSUs, and 1.0 year for ESPP.

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:

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
	(In millions, except per share data)			
Numerator:				
Net income	$ 6,188	$ 656	$ 8,232	$ 2,274
Denominator:				
Basic weighted average shares	2,473	2,495	2,472	2,500
Dilutive impact of outstanding equity awards	26	21	23	26
Diluted weighted average shares	2,499	2,516	2,495	2,526
Net income per share:				
Basic (1)	$ 2.50	$ 0.26	$ 3.33	$ 0.91
Diluted (2)	$ 2.48	$ 0.26	$ 3.30	$ 0.90
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	10	33	14	25

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

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

Note 6 – Income Taxes

Income tax was an expense of $793 million and $958 million for the second quarter and first half of fiscal year 2024, respectively, a benefit of $181 million for the second quarter of fiscal year 2023, and an expense of $6 million for the first half of fiscal year 2023. The income tax as a percentage of income before income tax was an expense of 11.4% and 10.4% for the second quarter and first half of fiscal year 2024, respectively, a benefit of 38.0% for the second quarter of fiscal year 2023, and an expense of 0.3% for the first half of fiscal year 2023.

The increase in the effective tax rate was primarily due to a decreased impact of tax benefits from the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to the increase in income before income tax.

Our effective tax rates for the first half of fiscal years 2024 and 2023 were lower than the U.S. federal statutory rate of 21% due to tax benefits from the foreign-derived intangible income deduction, stock-based compensation and the U.S. federal research tax credit.

For the first half of fiscal year 2024, there were no material changes to our tax years that remain subject to examination by major tax jurisdictions. We are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019. Additionally, there have been no material changes to our unrecognized tax benefits and any related interest or penalties since the fiscal year ended January 29, 2023.

While we believe that we have adequately provided for all uncertain tax positions, or tax positions where we believe it is not more-likely-than-not that the position will be sustained upon review, 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 with the respective tax authorities. As of July 30, 2023, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next 12 months.

Note 7 - 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:

	July 30, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 5,990	$ 1	$ (13)	$ 5,978	$ 2,149	$ 3,829
Debt securities issued by the U.S. Treasury	3,716	—	(31)	3,685	—	3,685
Debt securities issued by U.S. government agencies	2,903	—	(4)	2,899	647	2,252
Money market funds	2,348	—	—	2,348	2,348	—
Certificates of deposit	690	—	—	690	265	425
Foreign government bonds	248	—	—	248	199	49
Total	$ 15,895	$ 1	$ (48)	$ 15,848	$ 5,608	$ 10,240

	January 29, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 4,809	$ —	$ (12)	$ 4,797	$ 1,087	$ 3,710
Debt securities issued by the U.S. Treasury	4,185	1	(44)	4,142	—	4,142
Debt securities issued by U.S. 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

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

	July 30, 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 U.S. Treasury	$ 1,595	$ (16)	$ 1,375	$ (15)	$ 2,970	$ (31)
Corporate debt securities	1,379	(9)	802	(4)	2,181	(13)
Debt securities issued by U.S. government agencies	2,223	(4)	—	—	2,223	(4)
Total	$ 5,197	$ (29)	$ 2,177	$ (19)	$ 7,374	$ (48)

	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 U.S. 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 U.S. government agencies	1,307	(2)	—	—	1,307	(2)
Total	$ 4,939	$ (30)	$ 1,868	$ (28)	$ 6,807	$ (58)

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 are shown below by contractual maturity.

	July 30, 2023		January 29, 2023	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(In millions)			
Less than one year	$ 12,613	$ 12,592	$ 9,738	$ 9,708
Due in 1 - 5 years	3,282	3,256	3,374	3,347
Total	$ 15,895	$ 15,848	$ 13,112	$ 13,055

Restricted cash was $99 million as of July 30, 2023 and primarily represented amounts due to employees.

Note 8 – 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.

	Pricing Category	Fair Value at July 30, 2023	Fair Value at January 29, 2023
		(In millions)	
Assets			
Cash equivalents and marketable securities:			
Money market funds	Level 1	$ 2,348	$ 1,777
Corporate debt securities	Level 2	$ 5,978	$ 4,797
Debt securities issued by the U.S. Treasury	Level 2	$ 3,685	$ 4,142
Debt securities issued by U.S. government agencies	Level 2	$ 2,899	$ 1,834
Certificates of deposit	Level 2	$ 690	$ 365
Foreign government bonds	Level 2	$ 248	$ 140
Other assets (Investments in non-affiliated entities):			
Publicly-held equity securities	Level 1	$ 124	$ 11
Privately-held equity securities	Level 3	$ 676	$ 288
Liabilities (1)			
0.309% Notes Due 2023	Level 2	$ —	$ 1,230
0.584% Notes Due 2024	Level 2	$ 1,199	$ 1,185
3.20% Notes Due 2026	Level 2	$ 959	$ 966
1.55% Notes Due 2028	Level 2	$ 1,089	$ 1,099
2.85% Notes Due 2030	Level 2	$ 1,355	$ 1,364
2.00% Notes Due 2031	Level 2	$ 1,042	$ 1,044
3.50% Notes Due 2040	Level 2	$ 848	$ 870
3.50% Notes Due 2050	Level 2	$ 1,609	$ 1,637
3.70% Notes Due 2060	Level 2	$ 406	$ 410

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

Note 9 - Amortizable Intangible Assets and Goodwill

The components of our amortizable intangible assets are as follows:

	July 30, 2023			January 29, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(In millions)					
Acquisition-related intangible assets	$ 2,642	$ (1,448)	$ 1,194	$ 3,093	$ (1,614)	$ 1,479
Patents and licensed technology	453	(252)	201	446	(249)	197
Total intangible assets	$ 3,095	$ (1,700)	$ 1,395	$ 3,539	$ (1,863)	$ 1,676

Amortization expense associated with intangible assets was $146 million and $327 million for the second quarter and first half of fiscal year 2024, respectively, and $182 million and $336 million for the second quarter and first half of fiscal year 2023, respectively.

The following table outlines the estimated future amortization expense related to the net carrying amount of intangible assets as of July 30, 2023:

	Future Amortization Expense
	(In millions)
Fiscal Year:	
2024 (excluding first half of fiscal year 2024)	$ 288
2025	554
2026	259
2027	149
2028	36
2029 and thereafter	109
Total	$ 1,395

In the first half of fiscal year 2024, goodwill increased by $58 million from an acquisition, and was assigned to our Compute & Networking segment.

Note 10 - Balance Sheet Components

Certain balance sheet components are as follows:

	July 30, 2023	January 29, 2023
Inventories (1):	(In millions)	
Raw materials	$ 1,632	$ 2,430
Work in-process	1,058	466
Finished goods	1,629	2,263
Total inventories	$ 4,319	$ 5,159

(1) During the second quarter of fiscal years 2024 and 2023, we recorded an inventory provision of approximately $343 million and $570 million, respectively, in cost of revenue.

	July 30, 2023	January 29, 2023
Other Assets:	*(In millions)*	
Prepaid supply and capacity agreements (1)	$ 3,008	$ 2,989
Investments in non-affiliated entities	800	299
Prepaid royalties	375	387
Prepaid cloud services	170	23
Other	148	122
Total other assets	$ 4,501	$ 3,820

(1) As of July 30, 2023 and January 29, 2023, there were $799 million and $458 million of short-term prepaid supply and capacity agreements included in Prepaid expenses and other current assets, respectively.

	July 30, 2023	January 29, 2023
Accrued and Other Current Liabilities:	*(In millions)*	
Taxes payable	$ 2,803	$ 467
Customer program accruals	1,482	1,196
Excess inventory purchase obligations (1)	870	954
Accrued payroll and related expenses	642	530
Deferred revenue (2)	421	354
Unsettled share repurchases	217	—
Operating leases	208	176
Product warranty and return provisions	168	108
Licenses and royalties	144	149
Other	201	186
Total accrued and other current liabilities	$ 7,156	$ 4,120

(1) During the second quarter of fiscal years 2024 and 2023, we recorded an expense of approximately $232 million and $650 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.

	July 30, 2023	January 29, 2023
Other Long-Term Liabilities:	*(In millions)*	
Income tax payable (1)	$ 1,350	$ 1,204
Deferred income tax	373	247
Deferred revenue (2)	308	218
Licenses payable	127	181
Other	65	63
Total other long-term liabilities	$ 2,223	$ 1,913

(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 the first half of fiscal years 2024 and 2023:

	July 30, 2023	July 31, 2022
	(In millions)	
Balance at beginning of period	$ 572	$ 502
Deferred revenue additions during the period	713	399
Revenue recognized during the period	(556)	(341)
Balance at end of period	$ 729	$ 560

Revenue allocated to remaining performance obligations, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods, was $717 million as of July 30, 2023. We expect to recognize approximately 44% of this revenue 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.

We also 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 the 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:

	July 30, 2023	January 29, 2023
	(In millions)	
Designated as cash flow hedges	$ 1,138	$ 1,128
Non-designated hedges	$ 367	$ 366

The unrealized gains and losses or fair value of our foreign currency forward contracts was not significant as of July 30, 2023 and January 29, 2023.

As of July 30, 2023, all designated foreign currency forward contracts mature within 18 months. The expected realized gains and losses deferred into accumulated other comprehensive income or loss related to foreign currency forward contracts within the next twelve months was not significant.

During the first half of fiscal years 2024 and 2023, 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

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

	Expected Remaining Term (years)	Effective Interest Rate	Carrying Value at July 30, 2023	Carrying Value at January 29, 2023
			(In millions)	
0.309% Notes Due 2023	—	0.41%	$ —	$ 1,250
0.584% Notes Due 2024	0.9	0.66%	1,250	1,250
3.20% Notes Due 2026	3.1	3.31%	1,000	1,000
1.55% Notes Due 2028	4.9	1.64%	1,250	1,250
2.85% Notes Due 2030	6.7	2.93%	1,500	1,500
2.00% Notes Due 2031	7.9	2.09%	1,250	1,250
3.50% Notes Due 2040	16.7	3.54%	1,000	1,000
3.50% Notes Due 2050	26.7	3.54%	2,000	2,000
3.70% Notes Due 2060	36.7	3.73%	500	500
Unamortized debt discount and issuance costs			(45)	(47)
Net carrying amount			9,705	10,953
Less short-term portion			(1,249)	(1,250)
Total long-term portion			$ 8,456	$ 9,703

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.

On June 15, 2023, we repaid the 0.309% Notes Due 2023.

As of July 30, 2023, we were in compliance with the required covenants, which are non-financial in nature, under the outstanding notes.

Commercial Paper

We have a $575 million commercial paper program to support general corporate purposes. As of July 30, 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 and capacity agreements, certain software and technology licenses, other goods and services and long-lived assets.

As of July 30, 2023, we had outstanding inventory purchase and long-term supply and capacity obligations totaling $11.15 billion. During the normal course of business, to manage manufacturing lead times and help ensure adequate supply, we enter into agreements with contract manufacturers that allow them to procure inventory based upon criteria as defined by us, and in certain instances, these agreements allow us the option to cancel, reschedule, and adjust our requirements based on our business needs prior to firm orders being placed, but these changes may result in the payment of costs incurred through the date of cancellation. Other non-inventory purchase obligations of $4.31 billion include $3.50 billion of multi-year cloud service agreements.

Total future purchase commitments as of July 30, 2023 are as follows:

	Commitments
	(In millions)
Fiscal Year:	
2024 (excluding first half of fiscal year 2024)	$ 8,439
2025	3,960
2026	957
2027	999
2028	637
2029 and thereafter	468
Total	$ 15,460

Accrual for Product Warranty Liabilities

The estimated amount of product warranty liabilities was $115 million and $82 million as of July 30, 2023 and January 29, 2023, respectively. The estimated product returns and estimated product warranty activity consisted of the following:

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
	(In millions)			
Balance at beginning of period	$ 77	$ 55	$ 82	$ 46
Additions	42	122	55	138
Utilization	(4)	(9)	(22)	(16)
Balance at end of period	$ 115	$ 168	$ 115	$ 168

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 Condensed 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, 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. On August 25, 2023, a majority of a three-judge Ninth Circuit panel affirmed in part and reversed in part the district court's dismissal of the case, with a third judge dissenting on the basis that the district court did not err in dismissing the case.

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 July 30, 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.

Note 14 - Shareholders' Equity

Capital Return Program

During the second quarter and first half of fiscal year 2024, we repurchased 7.5 million shares of our common stock for $3.28 billion. During the second quarter and first half of fiscal year 2023, we repurchased 19 million and 28 million shares for $3.35 billion and $5.34 billion, respectively. Since the inception of our share repurchase program through July 30, 2023, we have repurchased an aggregate of 1.11 billion shares for a total cost of $20.40 billion. As of July 30, 2023, we were authorized, subject to certain specifications, to repurchase shares of our common stock up to $3.95 billion. On August 21, 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. From July 31, 2023 through August 24, 2023, we repurchased 2 million shares for $998 million pursuant to a Rule 10b5-1 trading plan. As of August 24, 2023, a total of $27.95 billion was available for repurchase. Our share repurchase program aims to offset dilution from shares issued to employees. We may pursue additional share repurchases as we weigh market factors and other investment opportunities.

During the second quarter and first half of fiscal year 2024, we paid $99 million and $199 million in cash dividends to our shareholders, respectively. During the second quarter and first half of fiscal year 2023, we paid $100 million and $200 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.

Note 15 - 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 artificial intelligence, or 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 software for cloud-based visual and virtual computing; automotive platforms for infotainment systems; and Omniverse Enterprise software for building and operating 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, acquisition termination cost, intellectual property related, or 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, our 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.

	Compute & Networking	Graphics	All Other	Consolidated
		(In millions)		
Three Months Ended July 30, 2023				
Revenue	$ 10,402	$ 3,105	$ —	$ 13,507
Operating income (loss)	$ 6,728	$ 1,211	$ (1,139)	$ 6,800
Three Months Ended July 31, 2022				
Revenue	$ 3,907	$ 2,797	$ —	$ 6,704
Operating income (loss)	$ 816	$ 657	$ (974)	$ 499
Six Months Ended July 30, 2023				
Revenue	$ 14,862	$ 5,837	$ —	$ 20,699
Operating income (loss)	$ 8,887	$ 2,258	$ (2,204)	$ 8,941
Six Months Ended July 31, 2022				
Revenue	$ 7,579	$ 7,413	$ —	$ 14,992
Operating income (loss)	$ 2,422	$ 3,133	$ (3,188)	$ 2,367

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
		(In millions)		
Reconciling items included in "All Other" category:				
Stock-based compensation expense	$ (842)	$ (649)	$ (1,576)	$ (1,227)
Unallocated cost of revenue and operating expenses	(163)	(148)	(317)	(275)
Acquisition-related and other costs	(137)	(175)	(311)	(324)
IP-related and legal settlement costs	(2)	—	(10)	(7)
Acquisition termination cost	—	—	—	(1,353)
Contributions	—	(2)	—	(2)
Other	5	—	10	—
Total	$ (1,139)	$ (974)	$ (2,204)	$ (3,188)

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:

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
	(In millions)			
Revenue:				
United States	$ 6,043	$ 1,988	$ 8,428	$ 3,921
Taiwan	2,839	1,204	4,635	3,981
China (including Hong Kong)	2,740	1,602	4,330	3,683
Other countries	1,885	1,910	3,306	3,407
Total revenue	$ 13,507	$ 6,704	$ 20,699	$ 14,992

One data center distributor customer represented approximately 17% and 13% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and was attributable to the Compute & Networking segment. There were no customers with 10% or more of total revenue for the second quarter and first half of fiscal year 2023.

A large cloud service provider, or CSP, which primarily purchases indirectly through multiple system integrators and distributors, is estimated to represent approximately 22% and 19% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and was attributable to our Compute & Networking segment.

Two customers accounted for 16% and 13% of our accounts receivable balance as of July 30, 2023. Two customers accounted for 14% and 11% of our accounts receivable balance as of January 29, 2023.

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

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
	(In millions)			
Revenue:				
Data Center	$ 10,323	$ 3,806	$ 14,607	$ 7,556
Gaming	2,486	2,042	4,726	5,662
Professional Visualization	379	496	674	1,118
Automotive	253	220	549	358
OEM and Other	66	140	143	298
Total revenue	$ 13,507	$ 6,704	$ 20,699	$ 14,992

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 in greater detail under the heading "Risk Factors" of such reports. 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 Quarterly Report on Form 10-Q 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.

 The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the risk factors set forth in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 and Part II, Item 1A. "Risk Factors" of this Quarterly Report on Form 10-Q and our Condensed Consolidated Financial Statements and related Notes thereto, as well as other cautionary statements and risks described elsewhere in this Quarterly Report on Form 10-Q and our other filings with the SEC, before deciding to purchase or sell shares of our common stock.

Overview

Our Company and Our Businesses

Since our founding in 1993, NVIDIA has been a pioneer in accelerated computing. Our invention of the GPU in 1999 has sparked the growth of the PC gaming market, redefined computer graphics, ignited the era of modern AI and has fueled industrial digitalization across markets. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry.

Our two operating segments are "Compute & Networking" and "Graphics," as described in Note 15 of the Notes to Condensed Consolidated Financial Statements.

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

Demand and Supply, Product Transitions, and New Products and Business Models

Demand for our data center systems and products has surged over the last two quarters and our demand visibility extends into next year. In order to meet this demand, we have increased our purchase obligations with existing suppliers, added new suppliers and entered into prepaid supply and capacity agreements. These increased purchase volumes and number of suppliers may create more supply chain complexity and execution risk. We expect our supply to increase each quarter through next year. We have entered and expect to continue to enter into supplier and capacity arrangements.

Product transitions are complex as we often ship both new and prior architecture products simultaneously and we and our channel partners prepare to ship and support new products. We are in various stages of 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 prior architectures ahead of new product introductions can create reductions or volatility in our revenue. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, may impair our ability to predict demand and impact our supply mix, and we may incur additional costs.

We build technology and products for use cases and applications that may be new or may not yet exist such as our Omniverse platform, third-party large language models, and generative AI models. We have recently begun offering enterprise customers NVIDIA DGX cloud services directly and through our network of partners, which includes cloud-based infrastructure and software and services for training and deploying AI models, and NVIDIA AI Foundations for customizable pretrained AI models. Our demand estimates for new use cases, applications, and services can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate significant revenue from these use cases, applications, and services. New technologies such as generative AI models have emerged, and while they have driven increased demand for Data Center compute infrastructure, the long-term trajectory is unknown.

Global Trade

During the third quarter of fiscal year 2023, the U.S. government, or the USG, announced 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. During the second quarter of fiscal year 2024, the USG informed us of an additional licensing requirement for a subset of A100 and H100 products destined to certain customers and other regions, including some countries in the Middle East. We have sold alternative products in China not subject to the license requirements, such as our A800 or H800 offerings.

Given the strength of demand for our products worldwide, we do not anticipate that additional export restrictions, if adopted, would have an immediate material impact on our financial results. However, over the long term, our results and competitive position may be harmed, and we may be effectively excluded from all or part of the China market if there are further changes in the USG's export controls, 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 the USG does not grant licenses in a timely manner or denies licenses to significant customers, or if we incur significant transition costs.

While we work to enhance the resiliency and redundancy of our supply chain, which is currently concentrated in the Asia-Pacific, including China, Hong Kong, Korea and Taiwan, new export controls or changes to existing export controls could negatively impact our business.

Macroeconomic Factors

Macroeconomic factors, including inflation, increased interest rates, significant capital market volatility, global supply chain constraints and global economic and geopolitical developments, may have direct and indirect impacts on our results of operations. While difficult to isolate and quantify, these macroeconomic factors can impact our supply chain and manufacturing costs, employee wages, costs for capital equipment and value of our investments. Our product and solution pricing strategy generally does not fluctuate with short-term changes in our costs. Within our supply chain, we continuously manage product availability and costs with our vendors.

Second Quarter of Fiscal Year 2024 Summary

	Three Months Ended				
	July 30, 2023	April 30, 2023	July 31, 2022	Quarter-over-Quarter Change	Year-over-Year Change
	($ in millions, except per share data)				
Revenue	$ 13,507	$ 7,192	$ 6,704	88 %	101 %
Gross margin	70.1 %	64.6 %	43.5 %	5.5 pts	26.6 pts
Operating expenses	$ 2,662	$ 2,508	$ 2,416	6 %	10 %
Operating income	$ 6,800	$ 2,140	$ 499	218 %	1,263 %
Net income	$ 6,188	$ 2,043	$ 656	203 %	843 %
Net income per diluted share	$ 2.48	$ 0.82	$ 0.26	202 %	854 %

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 the second quarter of fiscal year 2024 was $13.51 billion, up 101% from a year ago and up 88% sequentially.

Data Center revenue was up 171% from a year ago and up 141% sequentially, led by CSPs and large consumer internet companies. Strong demand for the NVIDIA HGX platform based on our Hopper and Ampere GPU architectures was primarily driven by the development of large language models and generative AI. Data Center Compute grew 195% from a year ago and 157% sequentially, largely reflecting the strong ramp of our Hopper-based HGX platform. Networking was up 94% from a year ago and up 85% sequentially, primarily on strong growth in InfiniBand infrastructure to support our HGX platform. In the second quarter of fiscal year 2024, CSPs represented slightly more than half of our estimated Data Center end demand, with large consumer internet companies being the next largest end demand, followed by enterprise and high performance computing.

Gaming revenue was up 22% from a year ago and up 11% sequentially, primarily reflecting demand for our GeForce RTX 40 Series GPUs based on the NVIDIA Ada Lovelace architecture following normalization of channel inventory levels.

Professional Visualization revenue was down 24% from a year ago and up 28% sequentially. The year-on-year decrease primarily reflects lower sell-in to partners following normalization of channel inventory levels. The sequential increase was primarily due to stronger enterprise workstation demand and the ramp of NVIDIA RTX products based on the Ada Lovelace Architecture.

Automotive revenue was up 15% from a year ago and down 15% sequentially. The year-on-year increase was primarily driven by sales of self-driving platforms. The sequential decrease primarily reflects lower overall auto demand, particularly in China.

Gross margin increased from a year ago and sequentially, primarily reflecting growth in Data Center sales. The year-on-year increase also reflects the impact on the year-ago gross margin from $1.34 billion in inventory provisions and related charges.

Operating expenses were up 10% from a year ago and up 6% sequentially, primarily driven by compensation and benefits, including stock-based compensation, reflecting growth in employees and compensation increases.

Market Platform Highlights

Data Center revenue for the second quarter of fiscal year 2024 was $10.32 billion, up 171% from a year ago. We announced that the NVIDIA GH200 Grace Hopper Superchip is available in the third quarter of fiscal year 2024; announced the NVIDIA L40S GPU - a universal data center processor for compute-intensive applications, including AI training and inference, is available now; unveiled the NVIDIA MGX server reference design; announced NVIDIA Spectrum-X, an accelerated networking platform for AI; and partnered with a range of companies on AI initiatives, including ServiceNow, Accenture, VMware, Snowflake, WPP, SoftBank, and Hugging Face.

Gaming revenue for the second quarter of fiscal year 2024 was $2.49 billion, up 22% from a year ago. We began shipping the GeForce RTX 4060 family of GPUs; and announced NVIDIA Avatar Cloud Engine for Games, a custom AI model foundry service using AI-powered natural language interactions to transform games.

Professional Visualization revenue for the second quarter of fiscal year 2024 was $379 million, down 24% from a year ago. We announced new NVIDIA RTX GPUs for desktop workstations based on the Ada Lovelace architecture; and a major release of the NVIDIA Omniverse platform.

Automotive revenue for the second quarter of fiscal year 2024 was $253 million, up 15% from a year ago. We announced that NVIDIA DRIVE Orin is powering the new XPENG G6 Coupe SUVs; and announced a partnership with MediaTek, which will develop mainstream automotive systems on chips for global OEMs integrating a new NVIDIA GPU chiplet IP for AI and graphics.

Financial Information by Business Segment and Geographic Data

Refer to Note 15 of the Notes to Condensed Consolidated Financial Statements for disclosure regarding segment information.

Critical Accounting Policies and Estimates

Refer to Part II, Item 7, "Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. There have been no material changes to our Critical Accounting Policies and Estimates.

Results of Operations

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

	Three Months Ended		Six Months Ended	
	July 30, 2023	July 31, 2022	July 30, 2023	July 31, 2022
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue	29.9	56.5	31.8	44.3
Gross profit	70.1	43.5	68.2	55.7
Operating expenses				
Research and development	15.1	27.2	18.9	23.0
Sales, general and administrative	4.7	8.8	6.1	7.9
Acquisition termination cost	—	—	—	9.0
Total operating expenses	19.8	36.0	25.0	39.9
Operating income	50.3	7.5	43.2	15.8
Interest income	1.4	0.7	1.6	0.4
Interest expense	(0.5)	(1.0)	(0.6)	(0.9)
Other, net	0.4	(0.1)	0.2	(0.1)
Other income (expense), net	1.3	(0.4)	1.2	(0.6)
Income before income tax	51.6	7.1	44.4	15.2
Income tax expense (benefit)	5.9	(2.7)	4.6	—
Net income	45.7 %	9.8 %	39.8 %	15.2 %

Revenue

Revenue for the second quarter and first half of fiscal year 2024 was $13.51 billion and $20.70 billion, up 101% and 38%, respectively.

Revenue by Reportable Segments

	Three Months Ended				Six Months Ended			
	July 30, 2023	**July 31, 2022**	**$ Change**	**% Change**	**July 30, 2023**	**July 31, 2022**	**$ Change**	**% Change**
				($ in millions)				
Compute & Networking	$ 10,402	$ 3,907	$ 6,495	166 %	$ 14,862	$ 7,579	$ 7,283	96 %
Graphics	3,105	2,797	308	11 %	5,837	7,413	(1,576)	(21)%
Total	$ 13,507	$ 6,704	$ 6,803	101 %	$ 20,699	$ 14,992	$ 5,707	38 %

Compute & Networking - The increase in the second quarter and first half of fiscal year 2024 compared to the second quarter and first half of fiscal year 2023 was primarily due to higher Data Center revenue. Compute GPUs grew 208% year-on-year and 112% compared to the first half of fiscal year 2023 led by demand for NVIDIA HGX platform based on our Hopper and Ampere GPU architecture for large language models and generative AI. Networking was up 94% year-on-year and 63% compared to the first half of last year driven primarily by strong growth in InfiniBand infrastructure to support our HGX platform.

Graphics - The increase in the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily reflects growth in Gaming GPUs related to the demand for our GeForce RTX 40 Series GPUs based on the NVIDIA Ada Lovelace architecture following normalization of channel inventory levels. The decrease in the first half of fiscal year 2024 compared to the first half of fiscal year 2023 primarily reflects 16% lower Gaming GPU sales and 36% lower Professional Visualization GPU sales, due to lower sell-in to partners following normalization of channel inventory levels.

Concentration of Revenue

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. Revenue from sales to customers outside of the United States accounted for 55% and 59% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and 70% and 74% of total revenue for the second quarter and first half of fiscal year 2023, respectively. The increase in revenue to the United States for the second quarter and first half of fiscal year 2024 was primarily due to higher U.S.-based Data Center end demand.

Our customer and partner network incorporates original equipment manufacturers, original device manufacturers, system builders, system integrators, add-in board manufacturers, retailers/distributors, independent software vendors, internet and CSPs, automotive manufacturers and tier-1 automotive suppliers, mapping companies, start-ups, and other ecosystem participants. One data center distributor customer represented approximately 17% and 13% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and was attributable to the Compute & Networking segment. There were no customers with 10% or more of total revenue for the second quarter and first half of fiscal year 2023.

A large CSP, which primarily purchases indirectly through multiple system integrators and distributors, is estimated to represent approximately 22% and 19% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and was attributable to our Compute & Networking segment. Our estimated Compute & Networking end customer demand is concentrated among several large CSPs and consumer internet companies. Most of these large companies do not purchase directly from us but often purchase through multiple system integrators, distributors, and channel partners. We expect this concentration trend will continue.

Gross Margin

Our overall gross margin increased to 70.1% and 68.2% for the second quarter and first half of fiscal year 2024, respectively, from 43.5% and 55.7% for the second quarter and first half of fiscal year 2023, respectively. The increase in the second quarter and first half of fiscal year 2024 compared to second quarter and first half of fiscal year 2023 was primarily due to higher revenue from Compute GPUs of 208% and 112%, respectively, and lower inventory provisions.

Provisions for inventory and excess inventory purchase obligations totaled $576 million and $709 million for the second quarter and first half of fiscal year 2024, respectively. Sales of inventory that was previously written off or down, or settlements of excess inventory purchase obligations, totaled $84 million and $134 million for the second quarter and first half of fiscal year 2024, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 3.6% and 2.8% in the second quarter and first half of fiscal year 2024, respectively.

Provisions for inventory and excess inventory purchase obligations totaled $1.22 billion and $1.31 billion for the second quarter and first half of fiscal year 2023, respectively. Sales of inventory that was previously written off or down, or settlements of excess inventory purchase obligations, totaled $23 million and $38 million for the second quarter and first half of fiscal year 2023, respectively. As a result, the overall net effect on our gross margin was an unfavorable impact of 17.8% and 8.5% in the second quarter and first half of fiscal year 2023, respectively.

Operating Expenses

	Three Months Ended				Six Months Ended			
	July 30, 2023	**July 31, 2022**	**$ Change**	**% Change**	**July 30, 2023**	**July 31, 2022**	**$ Change**	**% Change**
				($ in millions)				
Research and development expenses	$ 2,040	$ 1,824	$ 216	12 %	$ 3,916	$ 3,443	$ 473	14 %
% of net revenue	*15.1 %*	*27.2 %*			*18.9 %*	*23.0 %*		
Sales, general and administrative expenses	622	592	30	5 %	1,253	1,183	70	6 %
% of net revenue	*4.7 %*	*8.8 %*			*6.1 %*	*7.9 %*		
Acquisition termination cost	—	—	—	— %	—	1,353	(1,353)	(100)%
% of net revenue	— %	— %			— %	9.0 %		
Total operating expenses	$ 2,662	$ 2,416	$ 246	10 %	$ 5,169	$ 5,979	$ (810)	(14)%
% of net revenue	*19.8 %*	*36.0 %*			*25.0 %*	*39.9 %*		

The increases in research and development expenses and sales, general and administrative expenses for the second quarter and first half of fiscal year 2024 were primarily driven by compensation and benefits, including stock-based compensation, reflecting employee growth and compensation increases.

Acquisition termination cost

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.

Operating Income

Operating income for the second quarter and first half of fiscal year 2024 was $6.80 billion and $8.94 billion, respectively, up 1,263% and 278% from a year ago, respectively.

Operating income by Reportable Segments

	Three Months Ended				Six Months Ended			
	July 30, 2023	**July 31, 2022**	**$ Change**	**% Change**	**July 30, 2023**	**July 31, 2022**	**$ Change**	**% Change**
				($ in millions)				
Compute & Networking	$ 6,728	$ 816	$ 5,912	725 %	$ 8,887	$ 2,422	$ 6,465	267 %
Graphics	1,211	657	554	84 %	2,258	3,133	(875)	(28)%
All Other	(1,139)	(974)	(165)	17 %	(2,204)	(3,188)	984	(31)%
Total	$ 6,800	$ 499	$ 6,301	1,263 %	$ 8,941	$ 2,367	$ 6,574	278 %

Compute & Networking – Segment operating income increased during the second quarter and first half of fiscal year 2024 compared to the second quarter and first half of fiscal year 2023 primarily due to higher revenues.

Graphics - Segment operating income increased during the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily due to higher revenues of 11%. Segment operating income was also impacted by inventory provisions which were $81 million in the second quarter of fiscal year 2024 compared to $396 million in the second quarter of fiscal year 2023. Segment operating income decreased during the first half of fiscal year 2024 compared to the first half of fiscal year 2023 primarily due to lower revenues of 21%. Segment operating income was also impacted by inventory provisions which were $125 million in the first half of fiscal year 2024 compared to $416 million in the first half of fiscal year 2023.

All Other expenses increased during the second quarter of fiscal year 2024 compared to the second quarter of fiscal year 2023 primarily due to higher stock-based compensation expense. All Other expenses decreased during the first half of fiscal year 2024 compared to the first half of fiscal year 2023 primarily due to an acquisition termination cost of $1.35 billion related to the Arm transaction in the prior year.

Other Income (Expense), Net

	Three Months Ended			Six Months Ended		
	July 30, 2023	July 31, 2022	$ Change	July 30, 2023	July 31, 2022	$ Change
			($ in millions)			
Interest income	$ 187	$ 46	$ 141	$ 338	$ 64	$ 274
Interest expense	(65)	(65)	—	(131)	(132)	1
Other, net	59	(5)	64	42	(19)	61
Other income (expense), net	$ 181	$ (24)	$ 205	$ 249	$ (87)	$ 336

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.

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 the second quarter and first half of fiscal year 2023 was primarily driven by mark-to-market gains from publicly traded equity investments.

Income Taxes

Income tax was an expense of $793 million and $958 million for the second quarter and first half of fiscal year 2024, respectively, a benefit of $181 million for the second quarter of fiscal year 2023, and an expense of $6 million for the first half of fiscal year 2023. The income tax as a percentage of income before income tax was an expense of 11.4% and 10.4% for the second quarter and first half of fiscal year 2024, respectively, a benefit of 38.0% for the second quarter of fiscal year 2023, and an expense of 0.3% for the first half of fiscal year 2023.

The increase in the effective tax rate was primarily due to a decreased impact of tax benefits from the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to the increase in income before income tax.

Liquidity and Capital Resources

	July 30, 2023	January 29, 2023
	(In millions)	
Cash and cash equivalents	$ 5,783	$ 3,389
Marketable securities	10,240	9,907
Cash, cash equivalents and marketable securities	$ 16,023	$ 13,296

	Six Months Ended	
	July 30, 2023	July 31, 2022
	(In millions)	
Net cash provided by operating activities	$ 9,259	$ 3,001
Net cash provided by (used in) investing activities	$ (1,287)	$ 4,230
Net cash used in financing activities	$ (5,479)	$ (6,208)

As of July 30, 2023, we had $16.02 billion in cash, cash equivalents, and marketable securities, an increase of $2.73 billion from the end of fiscal year 2023. 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 increased in the first half of fiscal year 2024 compared to the first half of fiscal year 2023, primarily due to higher revenue and lower inventory, partially offset by higher accounts receivable. Accounts receivable in the second quarter of fiscal year 2024 benefited by approximately $1.25 billion from customer payments received ahead of the invoice due date.

Cash used in investing activities increased in the first half of fiscal year 2024 compared to the first half of fiscal year 2023, primarily driven by lower marketable securities sales and maturities, partially offset by lower purchases of marketable securities.

Cash used in financing activities decreased in the first half of fiscal year 2024 compared to the first half of fiscal year 2023, which primarily reflects lower share repurchases partially offset by a debt repayment in the second quarter of fiscal year 2024.

Liquidity

Our primary sources of liquidity are our cash, cash equivalents, and marketable securities, and the cash generated by our operations. As of July 30, 2023, we had $16.02 billion in cash, cash equivalents, and marketable securities. Our marketable securities consist of debt securities issued by the USG 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 7 of the Notes to Condensed Consolidated Financial Statements for additional information. 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 debt obligations, future supply obligations and vendor and supplier prepayments. We continuously evaluate our liquidity and capital resources, including our access to external capital, to ensure we can finance future capital requirements.

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. as of July 30, 2023 are available for use in the U.S. without incurring additional U.S. federal income taxes. We expect to pay approximately $3.81 billion in cash taxes in the third quarter of fiscal year 2024 as we had previously deferred our federal income tax payments due to the disaster relief made available by the Internal Revenue Service for certain California taxpayers.

Primarily based upon increased cash tax payments, we expect that our cash flow from operations will decline in the third quarter of fiscal year 2024 compared to the second quarter of fiscal year 2024.

Capital Return to Shareholders

During the second quarter and first half of fiscal year 2024, we returned $3.28 billion in share repurchases and $99 million and $199 million, respectively, in cash dividends. From July 31, 2023 through August 24, 2023, we repurchased 2 million shares for $998 million pursuant to a Rule 10b5-1 trading plan.

Our cash dividend program and the payment of future cash dividends under that program are subject to the continuing determination by our Board of Directors that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

As of July 30, 2023, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $3.95 billion. On August 21, 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. As of August 24, 2023, a total of $27.95 billion was available for repurchase. Our share repurchase program aims to offset dilution from shares issued to employees. We may pursue additional share repurchases as we weigh market factors and other investment opportunities. We plan to continue share repurchases this fiscal year.

The U.S. Inflation Reduction Act of 2022 was enacted on August 16, 2022 and requires a 1% excise tax on certain share repurchases in excess of shares issued for employee compensation made after December 31, 2022. We do not expect this provision to have a material effect on our consolidated financial statements.

Outstanding Indebtedness and Commercial Paper

Our aggregate debt maturities as of July 30, 2023, by year payable, are as follows:

	July 30, 2023
	(In millions)
Due in one year	$ 1,250
Due in one to five years	2,250
Due in five to ten years	2,750
Due in greater than ten years	3,500
Unamortized debt discount and issuance costs	(45)
Net carrying amount	9,705
Less short-term portion	(1,249)
Total long-term portion	$ 8,456

We have a $575 million commercial paper program to support general corporate purposes. As of July 30, 2023, we had not issued any commercial paper.

Material Cash Requirements and Other Obligations

We have unrecognized tax benefits of $1.25 billion, which includes related interest and penalties of $128 million recorded in non-current income tax payable as of July 30, 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 6 of the Notes to Condensed Consolidated Financial Statements for further information.

Other than the contractual obligations described above, there were no material changes outside the ordinary course of business in our contractual obligations from those disclosed in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. Refer to Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a description of our contractual obligations. For a description of our operating lease obligations, long-term debt, and purchase obligations, refer to Note 3, Note 12, and Note 13 of the Notes to Condensed Consolidated Financial Statements, respectively.

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

There has been no adoption of any new and recently issued accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Investment and Interest Rate Risk

Financial market risks related to investment and interest rate risk are described in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of July 30, 2023, there have been no material changes to the financial market risks described as of January 29, 2023.

Foreign Exchange Rate Risk

The impact of foreign currency transactions related to foreign exchange rate risk is described in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of July 30, 2023, there have been no material changes to the foreign exchange rate risks described as of January 29, 2023.

ITEM 4. CONTROLS AND PROCEDURES

Controls and Procedures

Disclosure Controls and Procedures

Based on their evaluation as of July 30, 2023, our management, including our Chief Executive Officer and Chief Financial Officer, has concluded that our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) were effective to provide reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes that occurred during the second quarter of fiscal year 2024 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. 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.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Part I, Item 1, Note 13 of the Notes to Condensed Consolidated Financial Statements for a discussion of significant developments in our legal proceedings since January 29, 2023. Also refer to Item 3, “Legal Proceedings” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a prior discussion of our legal proceedings.

ITEM 1A. RISK FACTORS

Other than the risk factors listed below, there have been no material changes from the risk factors previously described under Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 and Item 1A of our Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2023.

Purchasing or owning NVIDIA common stock involves investment risks including, but not limited to, the risks described in Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, in Item 1A of our Quarterly Report on Form 10-Q for the fiscal quarter ended April 30, 2023, and below. Additionally, any one of those risks could harm our business, financial condition and results of operations or reputation, which could cause our stock price to decline. 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.

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 and maintain 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 or acquire new products and technologies through investments in research and development;
- launch new offerings with new business models including software, services and cloud solutions, as well as software-, infrastructure-, or platform-as-a-service solutions;
- expand the ecosystem for our products and technologies;
- meet evolving and prevailing customer and industry safety, security, reliability expectations, 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 acquisition integrations, customer support, e-commerce, IP licensing capabilities and cloud service capacity; and
- complete technical, financial, operational, compliance, sales and marketing investments for the above activities.

We have invested 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 have recently begun offering enterprise customers NVIDIA DGX cloud services directly and through our network of partners, which includes cloud-based infrastructure and software and services for training and deploying AI models, and NVIDIA AI Foundations for customizable pretrained AI models. We have partnered with CSPs to host these software and services in their data centers, and we entered and may continue to enter into multi-year cloud service agreements to support these offerings and our research and development activities. The timing and availability of these cloud services has changed and may continue to change, impacting our revenue, expenses and development timelines. NVIDIA DGX cloud services may not be successful and will take time, resources and investment. We also offer or plan to offer standalone software solutions including NVIDIA AI Enterprise, NVIDIA Omniverse, NVIDIA DRIVE, 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 services. We may incur significant costs and may not achieve any significant revenue from these offerings.

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 in the past, 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. This risk may increase as a result of our platform strategy. 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.

Many additional factors 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 global or local health issues;
- rapidly changing technology or customer requirements;
- time to market;
- 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 NVIDIA DGX cloud services;
- changes that impact the ecosystem for the architectures underlying our products and technologies;
- the demand for our products relating to cryptocurrency mining, our Omniverse platform, third-party large language models and generative AI models; or
- government actions or changes in governmental policies, such as increased restrictions on gaming usage.

Demand for our data center systems and products has surged over the last two quarters and our demand visibility extends into next year. In order to meet this demand, we have increased our purchase obligations with existing suppliers, added new suppliers, and entered into prepaid supply and capacity agreements. These increased purchase volumes and number of suppliers may create more supply chain complexity and execution risk. We expect our supply to increase each quarter through next year. We have entered and expect to continue to enter into supplier and capacity arrangements. We may incur inventory provisions or impairments if our inventory or supply and capacity commitments are impacted by changes in demand for our products.

Our customer orders and longer-term demand estimates may change or may not be correct, as we have experienced in the past. Product transitions are complex and can impact our revenue as we often ship both new and prior 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 prior 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. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, and we may incur additional costs.

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 timely manner, or our contract manufacturers may experience supply constraints. If we cannot procure sufficient supply to meet demand or otherwise 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. Additionally, since some of our products are part of a complex data center buildout, supply constraints or availability issues with respect to any one component have had and may have a broader revenue impact.

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 and may continue to increase as our purchase obligations and prepaids have grown and are expected to continue to grow and become a greater portion of our total supply. 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, such as NVIDIA DGX cloud services, our Omniverse platform, third-party large language models and generative AI models. Our demand estimates for new use cases, applications, and services can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate significant revenue from these use cases, applications, and services. New technologies such as generative AI models have emerged, and while they have driven increased demand for Data Center compute infrastructure, the long-term trajectory is unknown. Because our products may be used in multiple use cases and applications, it is difficult for us to estimate with any reasonable degree of precision the impact of generative AI models on our reported revenue or forecasted demand. Additionally, we expect to start shipping our CPU product offerings, the Grace CPU and Grace Hopper Superchips, in the third quarter of fiscal year 2024. Our ability to adequately predict our CPU demand may create volatility in our revenue or supply levels.

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. 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 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, several years ago, our Gaming GPUs began to be used for mining digital currencies 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 Ethereum 2.0 merge in 2022, have reduced and may in the future decrease the usage of GPUs for Ethereum mining. This has created and may in the future 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. Following the Ethereum 2.0 merge, NVIDIA Ampere and Ada Lovelace GPU architectures no longer include LHR. In general, 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, customers, and other third parties to build, enhance, and maintain 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, customers, and other third parties to build, enhance, and maintain 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, or package 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. These subcontractors assist with procuring components used in our systems, boards, and products. 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;
- 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.

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

We sell our products internationally, and we also have operations and conduct business internationally. Our semiconductor wafers are manufactured, assembled, tested and packaged by third parties located outside of the United States, and we generated 55% and 59% of our revenue during the second quarter and first half of fiscal year 2024 from sales outside of the United States, respectively. 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 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.

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, supplier disruptions, terrorist attacks, or acts of violence, political and/or civil unrest, acts of war or other military actions, epidemics or pandemics, abrupt regulatory deterioration, 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 may 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, power 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.

Additionally, interruptions or delays in services from CSPs, data center co-location partners, and other third parties on which we rely, including due to the events described above or other events such as the insolvency of these parties, could impair our ability to provide our products and services and harm our business. As we increase our reliance on these third-party systems and services, our exposure to damage from service interruptions, defects, disruptions, outages, shortages and other performance and quality problems may increase. Data centers depend on access to clean water and predictable energy. Power or water shortages, or regulations that limit energy or water availability, could impair the ability of our customers to expand their data center capacity and consume our products and services.

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. 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. In addition, we have invested and may continue to invest in private companies to further our strategic objectives and to support certain key business initiatives. These companies can include early-stage companies still defining their strategic direction. Many of the instruments in which we invest are non-marketable and illiquid at the time of our initial investment, and we are not always able to achieve a return. To the extent any of the companies in which we invest are not successful, we could recognize an impairment and/or lose all or part of our investment. We face additional risks related to acquisitions and strategic investments, including the diversion of capital and other resources, including management's attention; 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; legal proceedings initiated as a result of an acquisition or investment; and potential failure of our due diligence processes to identify significant issues with the assets or company in which we are investing or are acquiring.

Additional risks related to acquisitions 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;
- 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;
- 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;
- 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;
- 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; 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 partners and distributors and we have a concentration of sales to end customers, and our revenue could be adversely affected if we lose or are prevented from selling to any of these end customers.

We receive a significant amount of our revenue from a limited number of customers within our distribution and partner network. For example, one data center distributor customer represented approximately 17% and 13% of total revenue for the second quarter and first half of fiscal year 2024, respectively. 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 generally cancel, change or delay product purchase commitments with little 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. A large CSP, which primarily purchases indirectly through multiple system integrators and distributors, is estimated to represent approximately 22% and 19% of total revenue for the second quarter and first half of fiscal year 2024, respectively, and was attributable to our Compute & Networking segment. Our estimated Compute & Networking end customer demand is concentrated among several large CSPs and consumer internet companies. Most of these large companies do not purchase directly from us but often purchase through multiple system integrators, distributors, and channel partners. We expect this concentration trend will continue. If end demand increases or our finished goods supply availability is concentrated near a quarter end, the system builders and channel partners may have limited ability to increase their credit, which could impact the timing and amount of our revenue. 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.

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 antitrust 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 and restrictions on the activities of U.S. persons, 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 risks and 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.

Concerns regarding third-party use of AI for purposes contrary to local governmental interests, including concerns relating to the misuse of AI applications, models, and solutions, could result in unilateral or multilateral restrictions on products that can be used for training, refining, and deploying large language models. Such restrictions could limit the ability of downstream customers and users worldwide to acquire, deploy, and use systems that include our products, software, and services, and negatively impact our business and financial results.

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. Potential export controls targeting GPUs and semiconductors associated with AI may also subject downstream users of our products to additional restrictions on the use, resale, repair, or transfer of our products, negatively impacting our business and financial results. Controls could negatively impact our cost and/or ability to provide services such as NVIDIA AI cloud services and could impact the cost and/or ability of our cloud customers to provide services to their end customers, even outside China.

Export controls could disrupt our supply chain and distribution channels, negatively impacting our ability to serve demand, including in markets outside China and for our gaming products. Even the possibility of additional export controls may also negatively impact demand for our products, benefitting competitors that offer alternatives less likely to be restricted by further controls. Repeated changes in the export control rules are likely to impose compliance burdens on our business and our customers, negatively and materially impacting our business.

Increasing use of economic sanctions and export controls 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 USG announced 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. The 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. During the second quarter of fiscal year 2024, the USG also informed us of an additional licensing requirement for a subset of A100 and H100 products destined to certain customers and other regions, including some countries in the Middle East.

Following these export controls, we transitioned some operations, including certain testing, validation, and supply and distribution operations out of China and Hong Kong. Any future transitions 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 sold alternative products in China not subject to the license requirements, such as our A800 or H800 offerings. To the extent that a customer requires products covered by the license requirements, we may seek a license for the customer but have no assurance that the USG will grant such a license, or that the USG will act on the license application in a timely manner. The requirements 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, especially over the long-term, if there are further changes in the USG's export controls, including further expansion of the geographic, customer, or product scope of the controls, if affected customers 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 to affected customers, 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. Given the increasing strategic importance of AI and rising geopolitical tensions, the USG may unilaterally change the export control rules at any time and subject a wide range of our products, including but not limited to A800, H800, and gaming products to export restrictions and licensing requirements, negatively impacting our business and financial results. In the event of such change, we may be unable to sell our inventory of such products and may be unable to develop replacement products not subject to the license requirements, effectively excluding us from all or part of the China market. For example, the USG has reportedly been urged to impose conditions to limit the ability of foreign firms to create large-scale GPU clusters, for example by requiring chip tracking and throttling mechanisms that would disable or impair GPUs if certain system or use conditions are detected. Such restrictions would be technically and commercially infeasible, and if imposed by the USG, would effectively prevent exports of products exceeding the thresholds to impacted regions and customers. Export controls restricting our gaming products, may disrupt a significant portion of our supply and distribution chain and negatively impact sales of such products to markets outside China, including the U.S. and Europe. Export controls may disrupt our supply and distribution chain for a substantial portion of our products, which are warehoused in and distributed from Hong Kong. Export controls restricting our ability to sell datacenter GPUs may also negatively impact demand for our networking products used in servers containing our GPUs. The USG may also impose export controls on our networking products, such as high-speed network interconnects, to limit the ability of downstream parties to create large clusters for frontier model training. Any new control that impacts a wide range of our products, including but not limited to A800, H800, and gaming products would likely have a disproportionate impact on NVIDIA and may disadvantage us against certain of our competitors that sell chips that are outside the scope of such control. Excessive or shifting export controls may also encourage customers outside China and other impacted regions to “design-out” U.S. semiconductors from their products to reduce the compliance burden and risk, and to ensure that they are able to serve markets worldwide. As a result, excessive or shifting export controls may negatively impact demand for our products and services not only in China, but also in other markets, such as Europe, Latin America, and Southeast Asia. Excessive or shifting export controls increase the risk of investing in U.S. advanced semiconductor products, because by the time a new product is ready for market, it may be subject to new unilateral export controls restricting its sale. At the same time, such controls may increase investment in foreign competitors, which would be less likely to be restricted by U.S. controls.

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. The Chinese government may impose restrictions on the sale to certain end customers of our products, or any products containing components made by our partners and suppliers. For example, the Chinese government recently announced restrictions relating to certain sales of products containing certain products made by Micron, a supplier of ours. Further restrictions on our products or the products of our suppliers could negatively impact our business and financial results.

Finally, our business depends on our ability to receive consistent and reliable supply from our overseas partners, especially in Taiwan. Any new restrictions that negatively impact our ability to receive supply of components, parts, or services from Taiwan, would negatively impact our business and 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 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

During the second quarter of fiscal year 2024, we repurchased 7.5 million shares of our common stock for $3.28 billion. Since the inception of our share repurchase program, we have repurchased an aggregate of 1.11 billion shares for a total cost of $20.40 billion through July 30, 2023. As of July 30, 2023, we were authorized, subject to certain specifications, to repurchase shares of our common stock up to $3.95 billion.

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 the second quarter and first half of fiscal year 2024, we paid $99 million and $199 million, respectively, in 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 second quarter of fiscal year 2024:

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)
May 1, 2023 - May 28, 2023	—	$ —	—	$ 7.23
May 29, 2023 - June 25, 2023	1.9	$ 420.77	1.9	$ 6.41
June 26, 2023 - July 30, 2023	5.6	$ 440.19	5.6	$ 3.95
Total	7.5		7.5	

On August 21, 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. From July 31, 2023 through August 24, 2023, we repurchased 2 million shares for $998 million pursuant to a Rule 10b5-1 trading plan. As of August 24, 2023, a total of $27.95 billion was available for repurchase.

Restricted Stock Unit Share Withholding

We also 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 the second quarter and first half of fiscal year 2024, we withheld approximately 1 million and 3 million shares, respectively, for a total value of $672 million and $1.18 billion, respectively.

ITEM 5. OTHER INFORMATION

None of our directors or officers adopted or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement,” as such terms are defined under Item 408(a) of Regulation S-K, during the second quarter of fiscal year 2024.

ITEM 6. EXHIBITS

Exhibit No.	Exhibit Description
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*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE*	Inline 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.

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 Quarterly Report on Form 10-Q 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.

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.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 25, 2023

NVIDIA Corporation

By: /s/ Colette M. Kress

Colette M. Kress

Executive Vice President and Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION

I, Jen-Hsun Huang, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 25, 2023

/s/JEN-HSUN HUANG
Jen-Hsun Huang
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Colette M. Kress, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 25, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Jen-Hsun Huang, the President and Chief Executive Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2023, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: August 25, 2023

/s/JEN-HSUN HUANG

Jen-Hsun Huang
President and Chief Executive Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

EXHIBIT 32.2

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Colette M. Kress, the Executive Vice President and Chief Financial Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of her knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended July 30, 2023, to which this Certification is attached as Exhibit 32.2 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: August 25, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

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

FORM 10-Q

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

For the quarterly period ended October 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

NVIDIA CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**94-3177549**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2788 San Tomas Expressway, Santa Clara, California	**95051**
(Address of principal executive offices)	**(Zip Code)**

(408) 486-2000
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year if changed since last report)

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

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of common stock, $0.001 par value, outstanding as of November 17, 2023, was 2.47 billion.

NVIDIA CORPORATION
FORM 10-Q
FOR THE QUARTER ENDED OCTOBER 29, 2023

TABLE OF CONTENTS

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 Company Blog (http://blogs.nvidia.com)

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

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

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

NVIDIA Twitter Account (https://twitter.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 Quarterly Report on Form 10-Q. These channels may be updated from time to time on NVIDIA's investor relations website.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

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

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
Revenue	$ 18,120	$ 5,931	$ 38,819	$ 20,923
Cost of revenue	4,720	2,754	11,309	9,400
Gross profit	13,400	3,177	27,510	11,523
Operating expenses				
Research and development	2,294	1,945	6,210	5,387
Sales, general and administrative	689	631	1,942	1,815
Acquisition termination cost	—	—	—	1,353
Total operating expenses	2,983	2,576	8,152	8,555
Operating income	10,417	601	19,358	2,968
Interest income	234	88	572	152
Interest expense	(63)	(65)	(194)	(198)
Other, net	(66)	(11)	(24)	(29)
Other income (expense), net	105	12	354	(75)
Income before income tax	10,522	613	19,712	2,893
Income tax expense (benefit)	1,279	(67)	2,237	(61)
Net income	$ 9,243	$ 680	$ 17,475	$ 2,954
Net income per share:				
Basic	$ 3.75	$ 0.27	$ 7.07	$ 1.18
Diluted	$ 3.71	$ 0.27	$ 7.01	$ 1.17
Weighted average shares used in per share computation:				
Basic	2,468	2,483	2,470	2,495
Diluted	2,494	2,499	2,494	2,517

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
Net income	$ 9,243	$ 680	$ 17,475	$ 2,954
Other comprehensive loss, net of tax				
Available-for-sale securities:				
Net change in unrealized gain (loss)	—	(18)	7	(53)
Reclassification adjustments for net realized gain included in net income	—	—	—	1
Net change in unrealized gain (loss)	—	(18)	7	(52)
Cash flow hedges:				
Net change in unrealized loss	(23)	(14)	(14)	(44)
Reclassification adjustments for net realized loss included in net income	(14)	(1)	(38)	(16)
Net change in unrealized loss	(37)	(15)	(52)	(60)
Other comprehensive loss, net of tax	(37)	(33)	(45)	(112)
Total comprehensive income	$ 9,206	$ 647	$ 17,430	$ 2,842

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In millions)
(Unaudited)

	October 29, 2023	January 29, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,519	$ 3,389
Marketable securities	12,762	9,907
Accounts receivable, net	8,309	3,827
Inventories	4,779	5,159
Prepaid expenses and other current assets	1,289	791
Total current assets	32,658	23,073
Property and equipment, net	3,844	3,807
Operating lease assets	1,316	1,038
Goodwill	4,430	4,372
Intangible assets, net	1,251	1,676
Deferred income tax assets	5,982	3,396
Other assets	4,667	3,820
Total assets	$ 54,148	$ 41,182
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,380	$ 1,193
Accrued and other current liabilities	5,472	4,120
Short-term debt	1,249	1,250
Total current liabilities	9,101	6,563
Long-term debt	8,457	9,703
Long-term operating lease liabilities	1,091	902
Other long-term liabilities	2,234	1,913
Total liabilities	20,883	19,081
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock	—	—
Common stock	2	2
Additional paid-in capital	12,991	11,971
Accumulated other comprehensive loss	(88)	(43)
Retained earnings	20,360	10,171
Total shareholders' equity	33,265	22,101
Total liabilities and shareholders' equity	$ 54,148	$ 41,182

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED OCTOBER 29, 2023 AND OCTOBER 30, 2022
(Unaudited)

	Common Stock Outstanding					
(In millions, except per share data)	Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity
Balances, July 30, 2023	2,469	$ 2	$ 12,629	$ (51)	$ 14,921	$ 27,501
Net income	—	—	—	—	9,243	9,243
Other comprehensive loss	—	—	—	(37)	—	(37)
Issuance of common stock from stock plans	7	—	157	—	—	157
Tax withholding related to vesting of restricted stock units	(2)	—	(764)	—	—	(764)
Shares repurchased	(8)	—	(14)	—	(3,705)	(3,719)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(99)	(99)
Stock-based compensation	—	—	983	—	—	983
Balances, October 29, 2023	2,466	$ 2	$ 12,991	$ (88)	$ 20,360	$ 33,265
Balances, July 31, 2022	2,489	$ 2	$ 10,968	$ (90)	$ 12,971	$ 23,851
Net income	—	—	—	—	680	680
Other comprehensive loss	—	—	—	(33)	—	(33)
Issuance of common stock from stock plans	9	—	143	—	—	143
Tax withholding related to vesting of restricted stock units	(2)	—	(294)	—	—	(294)
Shares repurchased	(28)	—	(1)	—	(3,646)	(3,647)
Cash dividends declared and paid ($0.04 per common share)	—	—	—	—	(100)	(100)
Stock-based compensation	—	—	749	—	—	749
Balances, October 30, 2022	2,468	$ 2	$ 11,565	$ (123)	$ 9,905	$ 21,349

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE NINE MONTHS ENDED OCTOBER 29, 2023 AND OCTOBER 30, 2022
(Unaudited)

(In millions, except per share data)	Common Stock Outstanding		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity
	Shares	Amount				
Balances, January 29, 2023	2,466	$ 2	$ 11,971	$ (43)	$ 10,171	$ 22,101
Net income	—	—	—	—	17,475	17,475
Other comprehensive loss	—	—	—	(45)	—	(45)
Issuance of common stock from stock plans	21	—	403	—	—	403
Tax withholding related to vesting of restricted stock units	(5)	—	(1,942)	—	—	(1,942)
Shares repurchased	(16)	—	(15)	—	(6,990)	(7,005)
Cash dividends declared and paid ($0.12 per common share)	—	—	—	—	(296)	(296)
Stock-based compensation	—	—	2,574	—	—	2,574
Balances, October 29, 2023	2,466	$ 2	$ 12,991	$ (88)	$ 20,360	$ 33,265
Balances, January 30, 2022	2,506	$ 3	$ 10,385	$ (11)	$ 16,235	$ 26,612
Net income	—	—	—	—	2,954	2,954
Other comprehensive loss	—	—	—	(112)	—	(112)
Issuance of common stock from stock plans	24	—	349	—	—	349
Tax withholding related to vesting of restricted stock units	(6)	—	(1,131)	—	—	(1,131)
Shares repurchased	(56)	(1)	(3)	—	(8,984)	(8,988)
Cash dividends declared and paid ($0.12 per common share)	—	—	—	—	(300)	(300)
Stock-based compensation	—	—	1,965	—	—	1,965
Balances, October 30, 2022	2,468	$ 2	$ 11,565	$ (123)	$ 9,905	$ 21,349

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	Nine Months Ended	
	October 29, 2023	October 30, 2022
Cash flows from operating activities:		
Net income	$ 17,475	$ 2,954
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	2,555	1,971
Depreciation and amortization	1,121	1,118
Losses on investments in non-affiliates	24	35
Deferred income taxes	(2,411)	(1,517)
Acquisition termination cost	—	1,353
Other	(170)	(27)
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(4,482)	(258)
Inventories	405	(1,848)
Prepaid expenses and other assets	(337)	(1,307)
Accounts payable	1,250	(358)
Accrued and other current liabilities	953	1,175
Other long-term liabilities	208	102
Net cash provided by operating activities	16,591	3,393
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	8,001	16,792
Proceeds from sales of marketable securities	—	1,806
Purchases of marketable securities	(10,688)	(9,764)
Purchases related to property and equipment and intangible assets	(815)	(1,324)
Acquisitions, net of cash acquired	(83)	(49)
Investments in non-affiliates and other, net	(872)	(83)
Net cash provided by (used in) investing activities	(4,457)	7,378
Cash flows from financing activities:		
Proceeds related to employee stock plans	403	349
Payments related to repurchases of common stock	(6,874)	(8,826)
Repayment of debt	(1,250)	—
Payments related to tax on restricted stock units	(1,942)	(1,131)
Dividends paid	(296)	(300)
Principal payments on property and equipment and intangible assets	(44)	(54)
Other	(1)	1
Net cash used in financing activities	(10,004)	(9,961)
Change in cash, cash equivalents, and restricted cash	2,130	810
Cash, cash equivalents, and restricted cash at beginning of period	3,389	1,990
Cash, cash equivalents, and restricted cash at end of period	$ 5,519	$ 2,800
Supplemental disclosure of cash flow information:		
Cash paid for income taxes, net	$ 4,676	$ 1,372

See accompanying Notes to Condensed Consolidated Financial Statements.

Note 1 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Securities and Exchange Commission, or SEC, Regulation S-X. The January 29, 2023 consolidated balance sheet was derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, as filed with the SEC, but does not include all disclosures required by U.S. GAAP. In the opinion of management, all adjustments, consisting only of normal recurring adjustments considered necessary for a fair statement of results of operations and financial position, have been included. The results for the interim periods presented are not necessarily indicative of the results expected for any future period. The following information should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Significant Accounting Policies

There have been no material changes to our significant accounting policies disclosed in Note 1 - Organization and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023.

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal years 2024 and 2023 are both 52-week years. The third quarters of fiscal years 2024 and 2023 were both 13-week quarters.

Reclassifications

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

Principles of Consolidation

Our condensed 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, property, plant, and equipment, and other contingencies. 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 our server, storage, and network equipment from three to a range of four to five years, and our 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, the estimated effect of this change for the three months ended October 29, 2023 was a benefit of $17 million and $24 million for cost of revenue and operating expenses, respectively, which resulted in an increase in operating income of $41 million and net income of $36 million after tax, or $0.01 per both basic and diluted share. The estimated effect of this change for the first nine months of fiscal year 2024 was a benefit of $24 million and $83 million for cost of revenue and operating expenses, respectively, which resulted in an increase in operating income of $107 million and net income of $91 million after tax, or $0.04 per both basic and diluted share.

Note 2 - Business Combination

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 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.

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 October 29, 2023 are as follows:

	Operating Lease Obligations
	(In millions)
Fiscal Year:	
2024 (excluding first nine months of fiscal year 2024)	$ 84
2025	269
2026	248
2027	233
2028	220
2029 and thereafter	454
Total	1,508
Less imputed interest	187
Present value of net future minimum lease payments	1,321
Less short-term operating lease liabilities	230
Long-term operating lease liabilities	$ 1,091

In addition, we have operating leases, primarily for our data centers, that are expected to commence between the fourth quarter of fiscal year 2024 and fiscal year 2025 with lease terms of 3 to 10 years for $924 million.

Operating lease expenses were $69 million and $49 million for the third quarter of fiscal years 2024 and 2023, respectively, and $195 million and $139 million for the first nine months of fiscal years 2024 and 2023, respectively. Short-term and variable lease expenses for the third quarter and first nine months of fiscal years 2024 and 2023 were not significant.

Other information related to leases was as follows:

	Nine Months Ended	
	October 29, 2023	October 30, 2022
	(In millions)	
Supplemental cash flows information		
Operating cash flows used for operating leases	$ 200	$ 134
Operating lease assets obtained in exchange for lease obligations	$ 439	$ 213

As of October 29, 2023, our operating leases had a weighted average remaining lease term of 6.3 years and a weighted average discount rate of 3.64%. 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%.

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 employee stock purchase plan, or ESPP.

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

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions)			
Cost of revenue	$ 38	$ 32	$ 96	$ 108
Research and development	701	530	1,826	1,365
Sales, general and administrative	240	183	633	498
Total	$ 979	$ 745	$ 2,555	$ 1,971

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 Per Share
	(In millions, except per share data)	
Balances, January 29, 2023	45	$ 158.45
Granted	13	$ 364.52
Vested	(16)	$ 141.02
Canceled and forfeited	(1)	$ 201.49
Balances, October 29, 2023	41	$ 230.11

As of October 29, 2023, there was $9.03 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 11 months for ESPP.

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:

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions, except per share data)			
Numerator:				
Net income	$ 9,243	$ 680	$ 17,475	$ 2,954
Denominator:				
Basic weighted average shares	2,468	2,483	2,470	2,495
Dilutive impact of outstanding equity awards	26	16	24	22
Diluted weighted average shares	2,494	2,499	2,494	2,517
Net income per share:				
Basic (1)	$ 3.75	$ 0.27	$ 7.07	$ 1.18
Diluted (2)	$ 3.71	$ 0.27	$ 7.01	$ 1.17
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	1	36	14	29

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

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

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. Any anti-dilutive effect of equity awards outstanding is not included in the computation of diluted net income per share.

Note 6 – Income Taxes

Income tax was an expense of $1.28 billion and $2.24 billion for the third quarter and first nine months of fiscal year 2024, respectively, and a benefit of $67 million and $61 million for the third quarter and first nine months of fiscal year 2023, respectively. Income tax as a percentage of income before income tax was an expense of 12.2% and 11.3% for the third quarter and first nine months of fiscal year 2024, respectively, and a benefit of 10.9% and 2.1% for the third quarter and first nine months of fiscal year 2023, respectively.

During the third quarter of fiscal year 2024, the Internal Revenue Service, or IRS, audit of our federal income tax returns for fiscal years 2018 and 2019 was resolved. We recognized a non-cash net benefit of $145 million, related to this IRS audit resolution, for effectively settled positions. This benefit consists of a reduction in unrecognized tax benefits of $236 million and related accrued interest of $17 million, net of federal benefit partially offset by additional cash tax payments and reductions in tax attribute carryforwards of $108 million.

The effective tax rate increased due to a decreased impact of tax benefits from the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to the increase in income before income tax. The increase in the effective tax rate was partially offset by a benefit due to the IRS audit resolution.

Our effective tax rates for the first nine months of fiscal years 2024 and 2023 were lower than the U.S. federal statutory rate of 21% due to tax benefits from the foreign-derived intangible income deduction, stock-based compensation and the U.S. federal research tax credit. Our effective tax rate for the first nine months of fiscal year 2024 was additionally benefited by the IRS audit resolution.

Other than the IRS audit resolution, for the first nine months of fiscal year 2024, there were no material changes to our tax years that remain subject to examination by major tax jurisdictions. Additionally, there have been no other material changes to our unrecognized tax benefits and any related interest or penalties since the fiscal year ended January 29, 2023.

While we believe that we have adequately provided for all uncertain tax positions, or tax positions where we believe it is not more-likely-than-not that the position will be sustained upon review, 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 with the respective tax authorities. As of October 29, 2023, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next 12 months.

Note 7 - 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:

	October 29, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 6,937	$ 1	$ (20)	$ 6,918	$ 1,714	$ 5,204
Debt securities issued by the U.S. Treasury	5,075	1	(24)	5,052	—	5,052
Money market funds	3,190	—	—	3,190	3,190	—
Debt securities issued by U.S. government agencies	2,316	—	(5)	2,311	100	2,211
Certificates of deposit	418	—	—	418	198	220
Foreign government bonds	175	—	—	175	100	75
Total	$ 18,111	$ 2	$ (49)	$ 18,064	$ 5,302	$ 12,762

	January 29, 2023					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 4,809	$ —	$ (12)	$ 4,797	$ 1,087	$ 3,710
Debt securities issued by the U.S. Treasury	4,185	1	(44)	4,142	—	4,142
Debt securities issued by U.S. 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

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

	October 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)					
Corporate debt securities	$ 2,773	$ (16)	$ 852	$ (4)	$ 3,625	$ (20)
Debt securities issued by the U.S. Treasury	2,098	(12)	1,371	(12)	3,469	(24)
Debt securities issued by U.S. government agencies	1,447	(5)	—	—	1,447	(5)
Total	$ 6,318	$ (33)	$ 2,223	$ (16)	$ 8,541	$ (49)

	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 U.S. 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 U.S. government agencies	1,307	(2)	—	—	1,307	(2)
Total	$ 4,939	$ (30)	$ 1,868	$ (28)	$ 6,807	$ (58)

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 are shown below by contractual maturity.

	October 29, 2023		January 29, 2023	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(In millions)			
Less than one year	$ 11,405	$ 11,388	$ 9,738	$ 9,708
Due in 1 - 5 years	6,706	6,676	3,374	3,347
Total	$ 18,111	$ 18,064	$ 13,112	$ 13,055

Note 8 – 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.

	Pricing Category	Fair Value at	
		October 29, 2023	January 29, 2023
		(In millions)	
Assets			
Cash equivalents and marketable securities:			
Money market funds	Level 1	$ 3,190	$ 1,777
Corporate debt securities	Level 2	$ 6,918	$ 4,797
Debt securities issued by the U.S. Treasury	Level 2	$ 5,052	$ 4,142
Debt securities issued by U.S. government agencies	Level 2	$ 2,311	$ 1,834
Certificates of deposit	Level 2	$ 418	$ 365
Foreign government bonds	Level 2	$ 175	$ 140
Other assets (Investments in non-affiliated entities):			
Publicly-held equity securities	Level 1	$ 153	$ 11
Privately-held equity securities	Level 3	$ 1,019	$ 288
Liabilities (1)			
0.309% Notes Due 2023	Level 2	$ —	$ 1,230
0.584% Notes Due 2024	Level 2	$ 1,212	$ 1,185
3.20% Notes Due 2026	Level 2	$ 945	$ 966
1.55% Notes Due 2028	Level 2	$ 1,060	$ 1,099
2.85% Notes Due 2030	Level 2	$ 1,289	$ 1,364
2.00% Notes Due 2031	Level 2	$ 981	$ 1,044
3.50% Notes Due 2040	Level 2	$ 756	$ 870
3.50% Notes Due 2050	Level 2	$ 1,388	$ 1,637
3.70% Notes Due 2060	Level 2	$ 342	$ 410

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

Note 9 - Amortizable Intangible Assets and Goodwill

The components of our amortizable intangible assets are as follows:

	October 29, 2023			January 29, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
			(In millions)			
Acquisition-related intangible assets	$ 2,642	$ (1,584)	$ 1,058	$ 3,093	$ (1,614)	$ 1,479
Patents and licensed technology	450	(257)	193	446	(249)	197
Total intangible assets	$ 3,092	$ (1,841)	$ 1,251	$ 3,539	$ (1,863)	$ 1,676

Amortization expense associated with intangible assets was $144 million and $471 million for the third quarter and first nine months of fiscal year 2024, respectively, and $181 million and $518 million for the third quarter and first nine months of fiscal year 2023, respectively.

The following table outlines the estimated future amortization expense related to the net carrying amount of intangible assets as of October 29, 2023:

	Future Amortization Expense
	(In millions)
Fiscal Year:	
2024 (excluding first nine months of fiscal year 2024)	$ 143
2025	554
2026	259
2027	149
2028	37
2029 and thereafter	109
Total	$ 1,251

In the first nine months of fiscal year 2024, goodwill increased by $58 million from an acquisition, and was assigned to our Compute & Networking segment.

Note 10 - Balance Sheet Components

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

Certain balance sheet components are as follows:

	October 29, 2023	January 29, 2023
Inventories (1):	(In millions)	
Raw materials	$ 1,663	$ 2,430
Work in-process	1,338	466
Finished goods	1,778	2,263
Total inventories	$ 4,779	$ 5,159

(1) During the third quarter of fiscal years 2024 and 2023, we recorded an inventory provision of approximately $208 million and $354 million, respectively, in cost of revenue.

	October 29, 2023	January 29, 2023
Other Assets:	(In millions)	
Prepaid supply and capacity agreements (1)	$ 2,927	$ 2,989
Investments in non-affiliated entities	1,172	299
Prepaid royalties	369	387
Prepaid cloud services	60	23
Other	139	122
Total other assets	$ 4,667	$ 3,820

(1) As of October 29, 2023 and January 29, 2023, there were an additional $743 million and $458 million of short-term prepaid supply and capacity agreements included in Prepaid expenses and other current assets, respectively.

	October 29, 2023	January 29, 2023
Accrued and Other Current Liabilities:	(In millions)	
Customer program accruals	$ 1,771	$ 1,196
Excess inventory purchase obligations (1)	1,280	954
Accrued payroll and related expenses	516	530
Deferred revenue (2)	513	354
Taxes payable	420	467
Product warranty and return provisions	299	108
Operating leases	230	176
Licenses and royalties	150	149
Unsettled share repurchases	117	—
Other	176	186
Total accrued and other current liabilities	$ 5,472	$ 4,120

(1) During the third quarter of fiscal years 2024 and 2023, we recorded an expense of approximately $473 million and $348 million, respectively, in cost of revenue for inventory purchase obligations in excess of our current demand projections, supplier charges and for penalties related to cancellations and underutilization.
(2) Deferred revenue primarily includes customer advances and deferrals related to license and development arrangements, support for hardware and software, and cloud services.

	October 29, 2023	January 29, 2023
Other Long-Term Liabilities:	(In millions)	
Income tax payable (1)	$ 1,206	$ 1,204
Deferred revenue (2)	425	218
Deferred income tax	424	247
Licenses payable	113	181
Other	66	63
Total other long-term liabilities	$ 2,234	$ 1,913

(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 the first nine months of fiscal years 2024 and 2023:

	October 29, 2023	October 30, 2022
	(In millions)	
Balance at beginning of period	$ 572	$ 502
Deferred revenue additions during the period	1,269	577
Revenue recognized during the period	(903)	(528)
Balance at end of period	$ 938	$ 551

Revenue allocated to remaining performance obligations, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods, was $896 million as of October 29, 2023. We expect to recognize approximately 42% of this revenue 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.

We also 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 the 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:

	October 29, 2023	January 29, 2023
	(In millions)	
Designated as cash flow hedges	$ 1,148	$ 1,128
Non-designated hedges	$ 365	$ 366

The unrealized gains and losses or fair value of our foreign currency forward contracts was not significant as of October 29, 2023 and January 29, 2023.

As of October 29, 2023, all designated foreign currency forward contracts mature within 18 months. The expected realized gains and losses deferred into accumulated other comprehensive income or loss related to foreign currency forward contracts within the next twelve months was not significant.

During the first nine months of fiscal years 2024 and 2023, 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

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

	Expected Remaining Term (years)	Effective Interest Rate	Carrying Value at October 29, 2023	Carrying Value at January 29, 2023
			(In millions)	
0.309% Notes Due 2023	—	0.41%	$ —	$ 1,250
0.584% Notes Due 2024	0.6	0.66%	1,250	1,250
3.20% Notes Due 2026	2.9	3.31%	1,000	1,000
1.55% Notes Due 2028	4.6	1.64%	1,250	1,250
2.85% Notes Due 2030	6.4	2.93%	1,500	1,500
2.00% Notes Due 2031	7.6	2.09%	1,250	1,250
3.50% Notes Due 2040	16.4	3.54%	1,000	1,000
3.50% Notes Due 2050	26.4	3.54%	2,000	2,000
3.70% Notes Due 2060	36.4	3.73%	500	500
Unamortized debt discount and issuance costs			(44)	(47)
Net carrying amount			9,706	10,953
Less short-term portion			(1,249)	(1,250)
Total long-term portion			$ 8,457	$ 9,703

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.

On June 15, 2023, we repaid the 0.309% Notes Due 2023.

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

Commercial Paper

We have a $575 million commercial paper program to support general corporate purposes. As of October 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 and capacity agreements, certain software and technology licenses, other goods and services and long-lived assets.

As of October 29, 2023, we had outstanding inventory purchase and long-term supply and capacity obligations totaling $17.11 billion. We enter into agreements with contract manufacturers that allow them to procure inventory based upon criteria as defined by us, and in certain instances, these agreements allow us the option to cancel, reschedule, and adjust our requirements based on our business needs prior to firm orders being placed, but these changes may result in the payment of costs incurred through the date of cancellation. Other non-inventory purchase obligations were $4.43 billion, which includes $3.60 billion of multi-year cloud service agreements, primarily to support our research and development efforts.

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

	Commitments
	(In millions)
Fiscal Year:	
2024 (excluding first nine months of fiscal year 2024)	$ 6,499
2025	11,861
2026	1,128
2027	1,038
2028	660
2029 and thereafter	354
Total	$ 21,540

Accrual for Product Warranty Liabilities

The estimated amount of product warranty liabilities was $142 million and $82 million as of October 29, 2023 and January 29, 2023, respectively. The estimated product returns and estimated product warranty activity consisted of the following:

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions)			
Balance at beginning of period	$ 115	$ 168	$ 82	$ 46
Additions	50	3	105	141
Utilization	(23)	(67)	(45)	(83)
Balance at end of period	$ 142	$ 104	$ 142	$ 104

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 Condensed 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, 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. On August 25, 2023, a majority of a three-judge Ninth Circuit panel affirmed in part and reversed in part the district court's dismissal of the case, with a third judge dissenting on the basis that the district court did not err in dismissing the case. On November 15, 2023, the Ninth Circuit denied NVIDIA's petition for rehearing *en banc* of the Ninth Circuit panel's majority decision to reverse in part the dismissal of the case, which NVIDIA had filed on October 10, 2023.

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. Following the Ninth Circuit's denial of NVIDIA's petition for rehearing on November 15, 2023, the parties will meet and confer regarding the next steps in this derivative matter. 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. Following the Ninth Circuit's denial of NVIDIA's petition for rehearing on November 15, 2023, the parties will meet and confer regarding the next steps in these derivative matters. 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.

Another putative derivative action was filed on October 30, 2023 in the Court of Chancery of the State of Delaware, captioned Horanic v. Huang, et al. (Case No. 2023-1096-KSJM). This lawsuit asserts claims, purportedly on behalf of us, against certain officers and directors of the Company for breach of fiduciary duty and insider trading 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 reform of unspecified corporate governance measures.

Accounting for Loss Contingencies

As of October 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.

Note 14 - Shareholders' Equity

Capital Return Program

During the third quarter and first nine months of fiscal year 2024, we repurchased 8.3 million and 15.9 million shares of our common stock for $3.72 billion and $7.01 billion, respectively. During the third quarter and first nine months of fiscal year 2023, we repurchased 28 million and 56 million shares of our common stock for

$3.65 billion and $8.99 billion, respectively. In August 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. As of October 29, 2023, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $25.24 billion. From October 30, 2023 through November 17, 2023, we repurchased 0.8 million shares for $366 million pursuant to a Rule 10b5-1 trading plan. Our share repurchase program aims to offset dilution from shares issued to employees. We may pursue additional share repurchases as we weigh market factors and other investment opportunities.

During the third quarter and first nine months of fiscal year 2024, we paid $99 million and $296 million in cash dividends to our shareholders, respectively. During the third quarter and first nine months of fiscal year 2023, we paid $100 million and $300 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.

Note 15 - 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 artificial intelligence, or 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 DGX Cloud.

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 software for cloud-based visual and virtual computing; automotive platforms for infotainment systems; and Omniverse Enterprise software for building and operating 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, corporate infrastructure and support costs, acquisition-related and other costs, intellectual property related, or IP-related costs, acquisition termination cost, 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, our 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.

	Compute & Networking	Graphics	All Other	Consolidated
	(In millions)			
Three Months Ended October 29, 2023				
Revenue	$ 14,645	$ 3,475	$ —	$ 18,120
Operating income (loss)	$ 10,262	$ 1,493	$ (1,338)	$ 10,417
Three Months Ended October 30, 2022				
Revenue	$ 3,816	$ 2,115	$ —	$ 5,931
Operating income (loss)	$ 1,086	$ 606	$ (1,091)	$ 601
Nine Months Ended October 29, 2023				
Revenue	$ 29,507	$ 9,312	$ —	$ 38,819
Operating income (loss)	$ 19,149	$ 3,751	$ (3,542)	$ 19,358
Nine Months Ended October 30, 2022				
Revenue	$ 11,395	$ 9,528	$ —	$ 20,923
Operating income (loss)	$ 3,509	$ 3,739	$ (4,280)	$ 2,968

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions)			
Reconciling items included in "All Other" category:				
Stock-based compensation expense	$ (979)	$ (745)	$ (2,555)	$ (1,971)
Unallocated cost of revenue and operating expenses	(198)	(156)	(515)	(432)
Acquisition-related and other costs	(135)	(174)	(446)	(499)
IP-related costs	(26)	—	(36)	—
Acquisition termination cost	—	—	—	(1,353)
Other	—	(16)	10	(25)
Total	$ (1,338)	$ (1,091)	$ (3,542)	$ (4,280)

Revenue by geographic region is designated based upon the billing location of the customer. Revenue by Geographic areas were as follows:

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions)			
Revenue:				
United States	$ 6,302	$ 2,148	$ 14,730	$ 6,069
Taiwan	4,333	1,153	8,968	5,134
China (including Hong Kong)	4,030	1,148	8,360	4,831
Singapore	2,702	536	4,506	1,963
Other countries	753	946	2,255	2,926
Total revenue	$ 18,120	$ 5,931	$ 38,819	$ 20,923

Revenue from sales to customers outside of the United States accounted for 65% and 62% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively, and 64% and 71% of total revenue for the third quarter and first nine months of fiscal year 2023, respectively. The increase in revenue to the United States for the third quarter and first nine months of fiscal year 2024 was primarily due to higher U.S.-based Data Center end demand.

Sales to one customer, or Customer A, represented 12% of total revenue for the third quarter of fiscal year 2024, and sales to a second customer, or Customer B, represented 11% of total revenue for the first nine months of fiscal year 2024, both of which were attributable to the Compute & Networking segment.

In the first nine months of fiscal year 2023, there were no customers with 10% or more of total revenue. In the third quarter of fiscal year 2023, one customer represented 10% of total revenue, primarily attributable to the Compute & Networking segment.

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

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
	(In millions)			
Revenue:				
Data Center	$ 14,514	$ 3,833	$ 29,121	$ 11,389
Gaming	2,856	1,574	7,582	7,236
Professional Visualization	416	200	1,090	1,318
Automotive	261	251	810	609
OEM and Other	73	73	216	371
Total revenue	$ 18,120	$ 5,931	$ 38,819	$ 20,923

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 and in our Quarterly Reports on Form 10-Q for the fiscal quarters ended April 30, 2023 and July 30, 2023 in greater detail under the heading "Risk Factors" of such reports. 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 Quarterly Report on Form 10-Q 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.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the risk factors set forth in this Quarterly Report on Form 10-Q, our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, and our Quarterly Reports on Form 10-Q for the fiscal quarters ended April 30, 2023 and July 30, 2023 under the heading "Risk Factors" of such reports, and our Condensed Consolidated Financial Statements and related Notes thereto, as well as other cautionary statements and risks described elsewhere in this Quarterly Report on Form 10-Q and our other filings with the SEC, before deciding to purchase or sell shares of our common stock.

Overview

Our Company and Our Businesses

Since our founding in 1993, NVIDIA has been a pioneer in accelerated computing. Our invention of the GPU in 1999 has sparked the growth of the PC gaming market, redefined computer graphics, ignited the era of modern AI and has fueled industrial digitalization across markets. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry.

Our two operating segments are "Compute & Networking" and "Graphics," as described in Note 15 of the Notes to Condensed Consolidated Financial Statements.

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

Demand and Supply, Product Transitions, and New Products and Business Models

Demand for our data center systems and products has surged over the last three quarters and our demand visibility extends into next year. To meet this expected demand, we have increased our purchase obligations with existing suppliers, added new suppliers and entered into prepaid supply and capacity agreements. These increased purchase volumes, the number of suppliers, and the integration of new suppliers into our supply chain may create more supply chain complexity and execution risk. We expect to continue to enter into supplier and capacity arrangements and expect our supply to increase each quarter through next year. We may incur inventory provisions or impairments if our inventory or supply or capacity commitments exceed demand for our products or demand declines.

We build finished products and maintain inventory in advance of anticipated demand. While we have entered 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. These risks may increase as we shorten our product development cycles or enter new lines of business, which may require us to integrate new suppliers into our supply chain, creating additional supply chain complexity.

Product transitions are complex as we often ship both new and prior architecture products simultaneously and we and our channel partners prepare to ship and support new products. Due to our product introduction cycles, we are almost always in various stages of transitioning the architecture of our Data Center, Professional Visualization, and Gaming products. We will have a broader and faster Data Center product launch cadence to meet a growing and diverse set of AI opportunities. The increased frequency of these transitions may magnify the challenges associated with managing our supply and demand due to long manufacturing lead times. Qualification time for new products, customers anticipating product transitions and channel partners reducing channel inventory of prior architectures ahead of new product introductions can create reductions or volatility in our revenue. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. Deployment of new products to customers creates additional challenges due to the complexity of our technologies, which has impacted and may in the future impact the timing of customer purchases or otherwise impact our demand. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, may impair our ability to predict demand and impact our supply mix, and we may incur additional costs.

We build technology and products for use cases and applications that may be new or may not yet exist such as our Omniverse platform, third-party large language models, and generative AI models. We have recently begun offering enterprise customers NVIDIA DGX cloud services directly and through our network of partners, which includes cloud-based infrastructure and software and services for training and deploying AI models, and NVIDIA AI Foundations for customizable pretrained AI models. Our demand estimates for new use cases, applications, and services can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate significant revenue from these use cases, applications, and services. New technologies such as generative AI models have emerged, and while they have driven increased demand for Data Center compute infrastructure, the long-term trajectory is unknown.

Global Trade

During the third quarter of fiscal year 2023, the U.S. government, or the USG, announced licensing 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.

During the second quarter of fiscal year 2024, the USG informed us of an additional licensing requirement for a subset of A100 and H100 products destined to certain customers and other regions, including some countries in the Middle East.

On October 17, 2023, the USG announced new and updated licensing requirements effective in our fourth quarter of fiscal year 2024 for exports to China and Country Groups D1, D4, and D5 (including but not limited to Saudi Arabia, the United Arab Emirates, and Vietnam, but excluding Israel) of our products exceeding certain performance thresholds, including A100, A800, H100, H800, L4, L40, L40S and RTX 4090. The licensing requirements also apply to the export of products exceeding certain performance thresholds to a party headquartered in, or with an ultimate parent headquartered in, Country Group D5, including China. On October 23, 2023, the USG informed us the licensing requirements were effective immediately for shipments of our A100, A800, H100, H800, and L40S products. These licensing requirements did not have a meaningful impact on our revenue in the third quarter of fiscal year 2024 as they were announced near the end of the fiscal quarter and we had additional demand from customers outside of the named country groups. Our sales to China and other affected destinations, derived from products that are now subject to licensing requirements, have consistently contributed approximately 20-25% of Data Center revenue over the past few quarters. We expect that our sales to these destinations will decline significantly in the fourth quarter of fiscal year 2024, though we believe the decline will be more than offset by strong growth in other regions.

We are working to expand our Data Center product portfolio to offer new regulation-compliant solutions, including those for which the USG does not wish to have any advance notice before each shipment. To the extent that a customer requires products covered by the licensing requirements, we may seek a license for the customer but have no assurance that the USG will grant such a license, or that the USG will act on the license application in a timely manner or at all.

Our competitive position has been harmed, and our competitive position and future results may be further harmed over the long-term, if there are further changes in the USG's export controls. Given the increasing strategic importance of AI and rising geopolitical tensions, the USG has changed and may again change the export control rules at any time and further subject a wider range of our products to export restrictions and licensing requirements, negatively impacting our business and financial results. In the event of such change, we may be unable to sell our inventory of such products and may be unable to develop replacement products not subject to the licensing requirements, effectively excluding us from all or part of the China market, as well as other impacted markets, including the Middle East. Our sales to China will decrease significantly in the fourth quarter of fiscal year 2024.

While we work to enhance the resiliency and redundancy of our supply chain, which is currently concentrated in the Asia-Pacific, including China, Hong Kong, Korea and Taiwan, new and existing export controls or changes to existing export controls could limit alternative manufacturing locations and negatively impact our business.

Macroeconomic Factors

Macroeconomic factors, including inflation, increased interest rates, capital market volatility, global supply chain constraints and global economic and geopolitical developments, may have direct and indirect impacts on our results of operations, particularly demand for our products. While difficult to isolate and quantify, these macroeconomic factors can also impact our supply chain and manufacturing costs, employee wages, costs for capital equipment and value of our investments. Our product and solution pricing strategy generally does not fluctuate with short-term changes in our costs. Within our supply chain, we continuously manage product availability and costs with our vendors.

Israel

We are monitoring the impact of the geopolitical conflict in and around Israel on our operations, including the health and safety of our approximately 3,400 employees in the region who primarily support the research and development, operations, and sales and marketing of our networking products. Our operating expenses in the third quarter of fiscal year 2024 include expenses for financial support to impacted employees and charitable activity. We believe our global supply chain for our networking products has not experienced any significant impact. Further, in connection with the conflict, a significant number and percentage of our employees have been called-up for active military duty in Israel. Accordingly, some of our employees in Israel may be absent for an extended and indeterminate period, which may cause disruption to our product development or operations. In the third quarter of fiscal year 2024, we did not experience any significant impact or expense to our business; however, if the conflict is extended, it could impact future product development, operations, and revenue or create other uncertainty for our business.

Third Quarter of Fiscal Year 2024 Summary

	Three Months Ended				
	October 29, 2023	July 30, 2023	October 30, 2022	Quarter-over-Quarter Change	Year-over-Year Change
	($ in millions, except per share data)				
Revenue	$ 18,120	$ 13,507	$ 5,931	34 %	206 %
Gross margin	74.0 %	70.1 %	53.6 %	3.9 pts	20.4 pts
Operating expenses	$ 2,983	$ 2,662	$ 2,576	12 %	16 %
Operating income	$ 10,417	$ 6,800	$ 601	53 %	1,633 %
Net income	$ 9,243	$ 6,188	$ 680	49 %	1,259 %
Net income per diluted share	$ 3.71	$ 2.48	$ 0.27	50 %	1,274 %

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 the third quarter of fiscal year 2024 was $18.12 billion, up 206% from a year ago and up 34% sequentially.

Data Center revenue was up 279% from a year ago and up 41% sequentially. Strong sales of the NVIDIA HGX platform were driven by global demand for the training and inferencing of large language models, recommendation engines, and generative AI applications. Data Center compute grew 324% from a year ago and 38% sequentially, largely reflecting the strong ramp of our Hopper GPU architecture-based HGX platform from cloud service providers, or CSPs, including GPU-specialized CSPs; consumer internet companies; and enterprises. Our sales of Ampere GPU architecture-based Data Center products were significant but declined sequentially, as we approach the tail end of this architecture. We recognized initial revenue on the ramp of our L40S GPU and the GH200 Grace Hopper Superchip for a broad range of customers. CSPs drove roughly half of Data Center revenue, while consumer internet companies and enterprises comprised approximately the other half. Networking was up 155% from a year ago and up 52% sequentially, almost entirely due to strong growth in InfiniBand infrastructure to support our HGX platform.

Gaming revenue was up 81% from a year ago and up 15% sequentially. Strong year-on-year growth reflects higher sell-in to partners following normalization of channel inventory levels. Sequential growth reflects strong demand for our GeForce RTX 40 Series GPUs for back-to-school and the start of the holiday season.

Professional Visualization revenue was up 108% from a year ago and up 10% sequentially. The year-on-year increase reflects higher sell-in to partners following normalization of channel inventory levels. The sequential increase was primarily due to stronger enterprise workstation demand and the ramp of notebook workstations based on the Ada Lovelace GPU architecture.

Automotive revenue was up 4% from a year ago and up 3% sequentially. The year-on-year increase primarily reflects growth in sales of auto cockpit solutions and self-driving platforms. The sequential increase was driven by sales of self-driving platforms.

Gross margin increased significantly from a year ago and sequentially, driven by improved product mix from Data Center revenue growth and lower net inventory provisions and related charges.

In the third quarter of fiscal year 2024, provisions for inventory and related charges were $681 million. Sales of previously reserved inventory or settlements of excess inventory purchase obligations resulted in a provision release of $239 million, primarily from Ampere GPU architecture products. The net inventory provisions were $442 million and the unfavorable effect on our gross margin was 2.4 percentage points.

In the third quarter of fiscal year 2023, provisions for inventory and related charges were $702 million. Sales of previously reserved inventory or settlements of excess inventory purchase obligations resulted in a provision release of $21 million. The net inventory provisions were $681 million and the unfavorable effect on our gross margin was 11.5 percentage points.

Operating expenses were up 16% from a year ago and up 12% sequentially, driven by compensation and benefits, including stock-based compensation, primarily reflecting growth in employees and compensation increases.

Market Platform Highlights

Data Center revenue for the third quarter of fiscal year 2024 was $14.51 billion, up 279% from a year ago and up 41% from the previous quarter. We announced NVIDIA HGX H200 with the H200 Tensor Core GPU; introduced an AI foundry service, first available on Microsoft Azure; announced that the NVIDIA Spectrum-X will be integrated into servers from Dell Technologies, Hewlett Packard Enterprise and Lenovo in the first quarter of next year; announced that NVIDIA GH200 Grace Hopper Superchips will power more than 40 new supercomputers and began shipping in the third quarter of fiscal year 2024; and partnered with a range of leading companies on AI initiatives, including Amdocs, Dropbox, Foxconn, Genentech (member of Roche Group), Infosys, Lenovo, Reliance Industries, Scaleway, and Tata Group.

Gaming revenue for the third quarter of fiscal year 2024 was $2.86 billion, up 81% from a year ago and up 15% from the previous quarter. We launched DLSS 3.5 Ray Reconstruction; released TensorRT-LLM for Windows; added 56 DLSS games and over 15 Reflex games; and surpassed 1,700 games on GeForce NOW.

Professional Visualization revenue for the third quarter of fiscal year 2024 was $416 million, up 108% from a year ago and up 10% from the previous quarter. We announced a new line of desktop workstations with NVIDIA RTX 6000 Ada Generation GPUs and NVIDIA ConnectX smart interface cards.

Automotive revenue for the third quarter of fiscal year 2024 was $261 million, up 4% from a year ago and up 3% from the previous quarter. We furthered our collaboration with Foxconn to develop next-generation electric vehicles.

Financial Information by Business Segment and Geographic Data

Refer to Note 15 of the Notes to Condensed Consolidated Financial Statements for disclosure regarding segment information.

Critical Accounting Policies and Estimates

Refer to Part II, Item 7, "Critical Accounting Policies and Estimates" of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. There have been no material changes to our Critical Accounting Policies and Estimates.

Results of Operations

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

	Three Months Ended		Nine Months Ended	
	October 29, 2023	October 30, 2022	October 29, 2023	October 30, 2022
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue	26.0	46.4	29.1	44.9
Gross profit	74.0	53.6	70.9	55.1
Operating expenses				
Research and development	12.7	32.8	16.0	25.7
Sales, general and administrative	3.8	10.6	5.0	8.7
Acquisition termination cost	—	—	—	6.5
Total operating expenses	16.5	43.4	21.0	40.9
Operating income	57.5	10.2	49.9	14.2
Interest income	1.3	1.5	1.5	0.7
Interest expense	(0.3)	(1.1)	(0.5)	(0.9)
Other, net	(0.4)	(0.2)	(0.1)	(0.1)
Other income (expense), net	0.6	0.2	0.9	(0.3)
Income before income tax	58.1	10.4	50.8	13.9
Income tax expense (benefit)	7.1	(1.1)	5.8	(0.3)
Net income	51.0 %	11.5 %	45.0 %	14.2 %

Revenue

Revenue for the third quarter and first nine months of fiscal year 2024 was $18.12 billion and $38.82 billion, up 206% and 86%, respectively.

Revenue by Reportable Segments

	Three Months Ended				Nine Months Ended			
	October 29, 2023	October 30, 2022	$ Change	% Change	October 29, 2023	October 30, 2022	$ Change	% Change
				($ in millions)				
Compute & Networking	$ 14,645	$ 3,816	$ 10,829	284 %	$ 29,507	$ 11,395	$ 18,112	159 %
Graphics	3,475	2,115	1,360	64 %	9,312	9,528	(216)	(2)%
Total	$ 18,120	$ 5,931	$ 12,189	206 %	$ 38,819	$ 20,923	$ 17,896	86 %

Compute & Networking - The increase in the third quarter and first nine months of fiscal year 2024 compared to the third quarter and first nine months of fiscal year 2023 was due to higher Data Center revenue. Compute GPUs grew 369% year-on-year and 193% compared to the first nine months of fiscal year 2023 led by strong demand for the NVIDIA HGX platform driven by global demand for the training and inferencing of large language models, recommendation engines and inferencing of generative AI applications. Networking was up 155% year-on-year and 99% compared to the first nine months of last year, almost entirely due to strong growth in InfiniBand infrastructure to support our HGX platform.

Graphics - The increase in the third quarter of fiscal year 2024 compared to the third quarter of fiscal year 2023 reflects growth in Gaming GPUs reflecting higher sell-in to partners following normalization of channel inventory levels earlier this year. The decrease in the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023 primarily reflects 57% lower enterprise graphics and 14% lower Professional Visualization GPUs, partially offset by 7% growth in Gaming GPUs, following normalization of channel inventory levels earlier this year.

Concentration of Revenue

Revenue by geographic region is designated based on the billing location even if the revenue may be attributable to end customers, or End Customers, such as CSPs, enterprises, and gamers in a different location. Revenue from sales to customers outside of the United States accounted for 65% and 62% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively, and 64% and 71% of total revenue for the third quarter and first nine months of fiscal year 2023, respectively.

Our customers include original equipment manufacturers, original device manufacturers, system builders, system integrators, add-in board manufacturers, retailers/distributors, automotive manufacturers, tier-1 automotive suppliers, and other enterprises.

Sales to Customer A represented 12% of total revenue for the third quarter of fiscal year 2024, and sales to Customer B represented 11% of total revenue for the first nine months of fiscal year 2024, both of which were attributable to the Compute & Networking segment.

Our customers sell to End Customers. Our End Customers often do not purchase directly from us but purchase through multiple original equipment manufacturers, original device manufacturers, system integrators, distributors, and other channel partners. Our sales to Customer A and Customer B were largely in support of two End Customers. One End Customer is estimated to have represented approximately 15% and 17% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively. A second End Customer is estimated to have represented approximately 13% and 10% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively. Both of these End Customers were primarily attributable to our Compute & Networking segment.

Our estimated Compute & Networking End Customer demand is expected to remain concentrated.

In the first nine months of fiscal year 2023, there were no customers with 10% or more of total revenue. In the third quarter of fiscal year 2023, one customer represented 10% of total revenue, primarily attributable to the Compute & Networking segment.

Gross Margin

Our overall gross margin increased to 74.0% and 70.9% for the third quarter and first nine months of fiscal year 2024, respectively, from 53.6% and 55.1% for the third quarter and first nine months of fiscal year 2023, respectively. The year over year increase in the third quarter and first nine months of fiscal year 2024 was primarily due to improved product mix from Data Center revenue growth of 279% and 156%, respectively, and lower net inventory provisions and related charges.

Provisions for inventory and excess inventory purchase obligations totaled $681 million and $1.39 billion for the third quarter and first nine months of fiscal year 2024, respectively. Sales of previously reserved inventory or settlements of excess inventory purchase obligations resulted in a provision release of $239 million and $372 million, primarily from Ampere GPU architecture products, for the third quarter and first nine months of fiscal year 2024, respectively. The net effect on our gross margin was an unfavorable impact of 2.4% and 2.6% in the third quarter and first nine months of fiscal year 2024.

Provisions for inventory and excess inventory purchase obligations totaled $702 million and $2.01 billion for the third quarter and first nine months of fiscal year 2023, respectively. Sales of previously reserved inventory or settlements of excess inventory purchase obligations resulted in a provision release of $21 million and $59 million for the third quarter and first nine months of fiscal year 2023, respectively. The net effect on our gross margin was an unfavorable impact of 11.5% and 9.3% in the third quarter and first nine months of fiscal year 2023, respectively.

Operating Expenses

	Three Months Ended				Nine Months Ended			
	October 29, 2023	October 30, 2022	$ Change	% Change	October 29, 2023	October 30, 2022	$ Change	% Change
	($ in millions)							
Research and development expenses	$ 2,294	$ 1,945	$ 349	18 %	$ 6,210	$ 5,387	$ 823	15 %
% of net revenue	*12.7 %*	*32.8 %*			*16.0 %*	*25.7 %*		
Sales, general and administrative expenses	689	631	58	9 %	1,942	1,815	127	7 %
% of net revenue	*3.8 %*	*10.6 %*			*5.0 %*	*8.7 %*		
Acquisition termination cost	—	—	—	— %	—	1,353	(1,353)	(100)%
% of net revenue	— %	— %			— %	6.5 %		
Total operating expenses	$ 2,983	$ 2,576	$ 407	16 %	$ 8,152	$ 8,555	$ (403)	(5)%
% of net revenue	*16.5 %*	*43.4 %*			*21.0 %*	*40.9 %*		

The increases in research and development expenses and sales, general and administrative expenses for the third quarter and first nine months of fiscal year 2024 were primarily driven by compensation and benefits, including stock-based compensation, reflecting employee growth and compensation increases.

Acquisition Termination Cost

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.

Operating Income

Operating income for the third quarter and first nine months of fiscal year 2024 was $10.42 billion and $19.36 billion, respectively, up 1,633% and 552% from a year ago, respectively.

Operating Income by Reportable Segments

	Three Months Ended				Nine Months Ended			
	October 29, 2023	October 30, 2022	$ Change	% Change	October 29, 2023	October 30, 2022	$ Change	% Change
				($ in millions)				
Compute & Networking	$ 10,262	$ 1,086	$ 9,176	845 %	$ 19,149	$ 3,509	$ 15,640	446 %
Graphics	1,493	606	887	146 %	3,751	3,739	12	— %
All Other	(1,338)	(1,091)	(247)	23 %	(3,542)	(4,280)	738	(17)%
Total	$ 10,417	$ 601	$ 9,816	1,633 %	$ 19,358	$ 2,968	$ 16,390	552 %

Compute & Networking – Segment operating income increased during the third quarter and first nine months of fiscal year 2024 compared to the third quarter and first nine months of fiscal year 2023 primarily due to growth in revenue.

Graphics - Segment operating income increased during the third quarter of fiscal year 2024 compared to the third quarter of fiscal year 2023 due to growth in revenue. Segment operating income was flat during the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023 due to a decline in revenue of $216 million, offset by lower provisions for inventory and excess inventory purchase obligations of $337 million in fiscal year 2024.

All Other expenses increased during the third quarter of fiscal year 2024 compared to the third quarter of fiscal year 2023 due to higher stock-based compensation expense. All Other expenses decreased during the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023 due to an acquisition termination cost of $1.35 billion related to the Arm transaction in the prior year, partially offset by higher stock-based compensation expense of $584 million.

Other Income (Expense), Net

	Three Months Ended			Nine Months Ended		
	October 29, 2023	October 30, 2022	$ Change	October 29, 2023	October 30, 2022	$ Change
			($ in millions)			
Interest income	$ 234	$ 88	$ 146	$ 572	$ 152	$ 420
Interest expense	(63)	(65)	2	(194)	(198)	4
Other, net	(66)	(11)	(55)	(24)	(29)	5
Other income (expense), net	$ 105	$ 12	$ 93	$ 354	$ (75)	$ 429

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

Interest expense is comprised of coupon interest and debt discount amortization related to our notes.

Other, net, consists of realized or unrealized gains and losses from investments in non-affiliated entities and the impact of changes in foreign currency rates. The loss in Other, net, in the third quarter of fiscal year 2024 was driven by mark-to-market losses from publicly traded equity investments.

Income Taxes

Income tax was an expense of $1.28 billion and $2.24 billion for the third quarter and first nine months of fiscal year 2024, respectively, and a benefit of $67 million and $61 million for the third quarter and first nine months of fiscal year 2023, respectively. Income tax as a percentage of income before income tax was an expense of 12.2% and 11.3% for the third quarter and first nine months of fiscal year 2024, respectively, and a benefit of 10.9% and 2.1% for the third quarter and first nine months of fiscal year 2023, respectively.

The effective tax rate increased due to a decreased impact of tax benefits from the foreign-derived intangible income deduction, stock-based compensation, and the U.S. federal research tax credit, relative to the increase in income before income tax. The increase in the effective tax rate was partially offset by a benefit due to the IRS audit resolution.

Liquidity and Capital Resources

	October 29, 2023	January 29, 2023
	(In millions)	
Cash and cash equivalents	$ 5,519	$ 3,389
Marketable securities	12,762	9,907
Cash, cash equivalents and marketable securities	$ 18,281	$ 13,296

	Nine Months Ended	
	October 29, 2023	October 30, 2022
	(In millions)	
Net cash provided by operating activities	$ 16,591	$ 3,393
Net cash provided by (used in) investing activities	$ (4,457)	$ 7,378
Net cash used in financing activities	$ (10,004)	$ (9,961)

As of October 29, 2023, we had $18.28 billion in cash, cash equivalents, and marketable securities, an increase of $4.99 billion from the end of fiscal year 2023. 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 increased in the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023, due to growth in revenue, partially offset by higher accounts receivable balance and taxes paid. Accounts receivable balance in the third quarter of fiscal year 2024 reflected approximately $570 million from customer payments received ahead of the invoice due date.

Cash provided by investing activities decreased in the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023, primarily driven by lower marketable securities maturities.

Cash used in financing activities increased in the first nine months of fiscal year 2024 compared to the first nine months of fiscal year 2023, due to a debt repayment in the second quarter of fiscal year 2024 and higher tax payments related to RSUs, partially offset by lower share repurchases.

Liquidity

Our primary sources of liquidity are our cash, cash equivalents, and marketable securities, and the cash generated by our operations. As of October 29, 2023, we had $18.28 billion in cash, cash equivalents, and marketable securities. Our marketable securities consist of debt securities issued by the USG 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 7 of the Notes to Condensed Consolidated Financial Statements for additional information. 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 debt obligations, future supply obligations and vendor and supplier prepayments. We continuously evaluate our liquidity and capital resources, including our access to external capital, to ensure we can finance future capital requirements.

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. as of October 29, 2023 are available for use in the U.S. without incurring additional U.S. federal income taxes. We paid $4.35 billion in cash taxes in the third quarter of fiscal year 2024, largely for previously deferred federal income tax payments related to the disaster relief made available by the IRS for certain California taxpayers.

Capital Return to Shareholders

During the third quarter and first nine months of fiscal year 2024, we returned $3.72 billion and $7.01 billion, respectively, in share repurchases and $99 million and $296 million, respectively, in cash dividends.

Our cash dividend program and the payment of future cash dividends under that program are subject to the continuing determination by our Board of Directors that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

On August 21, 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. As of October 29, 2023, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $25.24 billion. From October 30, 2023 through November 17, 2023, we repurchased 0.8 million shares for $366 million pursuant to a Rule 10b5-1 trading plan. Our share repurchase program aims to offset dilution from shares issued to employees. We may pursue additional share repurchases as we weigh market factors and other investment opportunities. We plan to continue share repurchases this fiscal year.

The U.S. Inflation Reduction Act of 2022 requires a 1% excise tax on certain share repurchases in excess of shares issued for employee compensation made after December 31, 2022. This provision has not had a material effect on our consolidated financial statements.

Outstanding Indebtedness and Commercial Paper

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

	October 29, 2023
	(In millions)
Due in one year	$ 1,250
Due in one to five years	2,250
Due in five to ten years	2,750
Due in greater than ten years	3,500
Unamortized debt discount and issuance costs	(44)
Net carrying amount	9,706
Less short-term portion	(1,249)
Total long-term portion	$ 8,457

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

Material Cash Requirements and Other Obligations

We have unrecognized tax benefits of $1.10 billion, which includes related interest and penalties of $115 million recorded in non-current income tax payable as of October 29, 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. Refer to Note 6 of the Notes to Condensed Consolidated Financial Statements for further information.

Other than the contractual obligations described above, there were no material changes outside the ordinary course of business in our contractual obligations from those disclosed in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. Refer to Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a description of our contractual obligations. For a description of our operating lease obligations, long-term debt, and purchase obligations, refer to Note 3, Note 12, and Note 13 of the Notes to Condensed Consolidated Financial Statements, respectively.

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

There has been no adoption of any new and recently issued accounting pronouncements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Investment and Interest Rate Risk

Financial market risks related to investment and interest rate risk are described in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of October 29, 2023, there have been no material changes to the financial market risks described as of January 29, 2023.

Foreign Exchange Rate Risk

The impact of foreign currency transactions related to foreign exchange rate risk is described in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023. As of October 29, 2023, there have been no material changes to the foreign exchange rate risks described as of January 29, 2023.

ITEM 4. CONTROLS AND PROCEDURES

Controls and Procedures

Disclosure Controls and Procedures

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

Changes in Internal Control Over Financial Reporting

There were no changes that occurred during the third quarter of fiscal year 2024 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. 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.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Refer to Part I, Item 1, Note 13 of the Notes to Condensed Consolidated Financial Statements for a discussion of significant developments in our legal proceedings since January 29, 2023. Also refer to Item 3, "Legal Proceedings" in our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 for a prior discussion of our legal proceedings.

ITEM 1A. RISK FACTORS

Other than the risk factors listed below, there have been no material changes from the risk factors previously described under Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023 and Items 1A of our Quarterly Reports on Form 10-Q for the fiscal quarters ended April 30, 2023 and July 30, 2023.

Purchasing or owning NVIDIA common stock involves investment risks including, but not limited to, the risks described in Item 1A of our Annual Report on Form 10-K for the fiscal year ended January 29, 2023, in Items 1A of our Quarterly Reports on Form 10-Q for the fiscal quarters ended April 30, 2023 and July 30, 2023, and below. Additionally, any one of those risks could harm our business, financial condition and results of operations or reputation, which could cause our stock price to decline. 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.

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 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 in the past, 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. These risks may increase as we shorten our product development cycles or enter new lines of business, which may require us to integrate new suppliers into our supply chain, creating additional supply chain complexity. 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. This risk may increase as a result of our platform strategy. 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 and may continue to experience 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. If our existing suppliers are unable to scale their capabilities to meet our supply needs, we may require additional sources of capacity, which may require additional deposits. We may not have the ability to reduce our supply commitments at the same rate or at all if our revenue declines.

Many additional factors 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:

- changes in product development cycles and time to market;
- 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 global or local health issues;
- rapidly changing technology or customer requirements;
- 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 NVIDIA DGX cloud services;
- changes that impact the ecosystem for the architectures underlying our products and technologies;
- the demand for our products relating to cryptocurrency mining, our Omniverse platform, third-party large language models and generative AI models; or
- government actions or changes in governmental policies, such as export controls or increased restrictions on gaming usage.

Demand for our data center systems and products has surged over the last three quarters and our demand visibility extends into next year. To meet this expected demand, we have increased our purchase obligations with existing suppliers, added new suppliers, and entered into prepaid supply and capacity agreements. These increased purchase volumes, the number of suppliers, and the integration of new suppliers into our supply chain, may create more supply chain complexity and execution risk. We expect to continue to enter into supplier and capacity arrangements and expect our supply to increase each quarter through next year. We may incur inventory provisions or impairments if our inventory or supply or capacity commitments exceed demand for our products or demand declines.

Our customer orders and longer-term demand estimates may change or may not be correct, as we have experienced in the past. Product transitions are complex and can impact our revenue as we often ship both new and prior architecture products simultaneously and we and our channel partners prepare to ship and support new products. Due to our product introduction cycles, we are almost always in various stages of transitioning the architecture of our Data Center, Professional Visualization, and Gaming products. We will have a broader and faster Data Center product launch cadence to meet a growing and diverse set of AI opportunities. The increased frequency of these transitions may magnify the challenges associated with managing our supply and demand due to long manufacturing lead times. Qualification time for new products, customers anticipating product transitions and channel partners reducing channel inventory of prior 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. If we are unable to execute our architectural transitions as planned for any reason, our financial results may be negatively impacted. In addition, the bring up of new product architectures is complex due to functionality challenges and quality concerns not identified in manufacturing testing. These product quality issues may incur costs, increase our warranty costs, and delay further production of our architecture. Deployment of new products to customers creates additional challenges due to the complexity of our technologies, which has impacted and may in the future impact the timing of customer purchases or otherwise impact our demand. While we have managed prior product transitions and have previously sold multiple product architectures at the same time, these transitions are difficult, may impair our ability to predict demand and impact our supply mix, and we may incur additional costs.

Our End Customers often do not purchase directly from us but purchase through multiple original equipment manufacturers, original device manufacturers, system integrators, distributors, and other channel partners. As a result, the decisions made by our multiple original equipment manufacturers, original device manufacturers, system integrators, distributors, and other channel partners, 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 timely manner, or our contract manufacturers may experience supply constraints. If we cannot procure sufficient supply to meet demand or otherwise 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. Additionally, since some of our products are part of a complex data center buildout, supply constraints or availability issues with respect to any one component have had and may have a broader revenue impact.

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 and may continue to increase as our purchase obligations and prepaids have grown and are expected to continue to grow and become a greater portion of our total supply. 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, such as NVIDIA DGX cloud services, NVIDIA AI Foundations, our Omniverse platform, third-party large language models and generative AI models. Our demand estimates for new use cases, applications, and services can be incorrect and create volatility in our revenue or supply levels, and we may not be able to generate significant revenue from these use cases, applications, and services. New technologies such as generative AI models have emerged, and while they have driven increased demand for Data Center compute infrastructure, the long-term trajectory is unknown. Because our products may be used in multiple use cases and applications, it is difficult for us to estimate with any reasonable degree of precision the impact of generative AI models on our reported revenue or forecasted demand. Additionally, we started shipping our CPU product offerings, the Grace CPU and Grace Hopper Superchips, in the third quarter of fiscal year 2024. Our ability to adequately predict our CPU demand may create volatility in our revenue or supply levels.

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. 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 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, several years ago, our Gaming GPUs began to be used for mining digital currencies 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 Ethereum 2.0 merge in 2022, have reduced and may in the future decrease the usage of GPUs for Ethereum mining. This has created and may in the future 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 cryptocurrency mining processors, or CMP, products in an effort to address demand from gamers and direct miners to CMP. Following the Ethereum 2.0 merge, NVIDIA Ampere and Ada Lovelace GPU architectures no longer include LHR. In general, 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, customers, and other third parties to build, enhance, and maintain 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, customers, and other third parties to build, enhance, and maintain 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.

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

We sell our products internationally, and we also have operations and conduct business internationally. Our semiconductor wafers are manufactured, assembled, tested and packaged by third parties located outside of the United States, and we generated 65% and 62% of our revenue during the third quarter and first nine months of fiscal year 2024 from sales outside of the United States, respectively. Due to recent USG licensing requirements, we expect that our sales to China and other affected destinations will decline significantly in the fourth quarter of fiscal year 2024. 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 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.

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, supplier disruptions, terrorist attacks, or acts of violence, political and/or civil unrest, acts of war or other military actions, epidemics or pandemics, abrupt regulatory deterioration, 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 may 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, power 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.

We are monitoring the impact of the geopolitical conflict in and around Israel on our operations, including the health and safety of our approximately 3,400 employees in the region who primarily support the research and development, operations, and sales and marketing of our networking products. Our operating expenses in the third quarter of fiscal year 2024 include expenses for financial support to impacted employees and charitable activity. We believe our global supply chain for our networking products has not experienced any significant impact. Further, in connection with the conflict, a significant number and percentage of our employees have been called-up for active military duty in Israel. Accordingly, some of our employees in Israel may be absent for an extended and indeterminate period, which may cause disruption to our product development or operations. In the third quarter of fiscal year 2024, we did not experience any significant impact or expense to our business; however, if the conflict is extended, it could impact future product development, operations, and revenue or create other uncertainty for our business.

Additionally, interruptions or delays in services from CSPs, data center co-location partners, and other third parties on which we rely, including due to the events described above or other events such as the insolvency of these parties, could impair our ability to provide our products and services and harm our business. As we increase our reliance on these third-party systems and services, our exposure to damage from service interruptions, defects, disruptions, outages, shortages and other performance and quality problems may increase. Data centers depend on access to clean water and predictable energy. Power or water shortages, or regulations that limit energy or water availability, could impair the ability of our customers to expand their data center capacity and consume our products and services.

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. 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, our investments in publicly traded companies could create volatility in our results and may generate losses up to the value of the investment. In addition, we have invested and may continue to invest in private companies to further our strategic objectives and to support certain key business initiatives. These companies can include early-stage companies still defining their strategic direction. Many of the instruments in which we invest are non-marketable and illiquid at the time of our initial investment, and we are not always able to achieve a return. To the extent any of the companies in which we invest are not successful, we could recognize an impairment and/or lose all or part of our investment. Our investment portfolio may contain industry sector concentration risks, and a decline in any one or multiple industry sectors could increase our impairment losses. We face additional risks related to acquisitions and strategic investments, including the diversion of capital and other resources, including management's attention; 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; legal proceedings initiated as a result of an acquisition or investment; and potential failure of our due diligence processes to identify significant issues with the assets or company in which we are investing or are acquiring.

Additional risks related to acquisitions 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;
- 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;

- 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;
- 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;
- 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; 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 partners and distributors and we have a concentration of sales to End Customers, and our revenue could be adversely affected if we lose or are prevented from selling to any of these End Customers.

We receive a significant amount of our revenue from a limited number of customers within our distribution and partner network. Sales to Customer A represented 12% of total revenue for the third quarter of fiscal year 2024, and sales to Customer B represented 11% of total revenue for the first nine months of fiscal year 2024, both of which were attributable to the Compute & Networking segment. With several of these channel partners, we are selling multiple products and systems in our portfolio 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 generally cancel, change or delay product purchase commitments with little 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. Our sales to Customer A and Customer B were largely in support of two End Customers. One End Customer is estimated to have represented approximately 15% and 17% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively. A second End Customer is estimated to have represented approximately 13% and 10% of total revenue for the third quarter and first nine months of fiscal year 2024, respectively. Both of these End Customers were primarily attributable to our Compute & Networking segment. Our estimated Compute & Networking End Customer demand is expected to remain concentrated. Our customers sell to End Customers. Our End Customers often do not purchase directly from us but purchase through multiple original equipment manufacturers, original device manufacturers, system integrators, distributors, and other channel partners. If end demand increases or our finished goods supply availability is concentrated near a quarter end, the system integrators, distributors, and channel partners may have limited ability to increase their credit, which could impact the timing and amount of our revenue. 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.

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 antitrust legislation, regulation, administrative rule making, increased focus from regulators on cybersecurity vulnerabilities and risks. Our position in markets relating to AI has led to increased interest in our business from regulators worldwide, including the European Union, the United States, and China. For example, the French Competition Authority collected information from us regarding our business and competition in the graphics card and cloud service provider market as part of an ongoing inquiry into competition in those markets. We have also received requests for information from regulators in the European Union and China regarding our sales of GPUs and our efforts to allocate supply, and we expect to receive additional requests for information in the future. 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 and restrictions on the activities of U.S. persons, 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 risks and strategic importance of AI technologies has 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.

Concerns regarding third-party use of AI for purposes contrary to local governmental interests, including concerns relating to the misuse of AI applications, models, and solutions, has resulted in and could in the future result in unilateral or multilateral restrictions on products that can be used for training, refining, and deploying large language models. Such restrictions have limited and could in the future limit the ability of downstream customers and users worldwide to acquire, deploy, and use systems that include our products, software, and services, and negatively impact our business and financial results.

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. The United States has imposed unilateral controls restricting GPUs and associated products, and it is likely that additional unilateral or multilateral controls will be adopted. Such controls have been and may again 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 have been imposed and are increasingly likely to be further tightened, would further 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. Export controls targeting GPUs and semiconductors associated with AI have subjected and may in the future subject downstream users of our products to additional restrictions on the use, resale, repair, or transfer of our products, negatively impacting our business and financial results. Controls could negatively impact our cost and/or ability to provide services such as NVIDIA AI cloud services and could impact the cost and/or ability for our cloud service providers and customers to provide services to their End Customers, even outside China.

Export controls could disrupt our supply chain and distribution channels, negatively impacting our ability to serve demand, including in markets outside China and for our gaming products. Even the possibility of additional export controls has negatively impacted and may in the future negatively impact demand for our products, benefitting competitors that offer alternatives less likely to be restricted by further controls. Repeated changes in the export control rules are likely to impose compliance burdens on our business and our customers, negatively and materially impacting our business.

Increasing use of economic sanctions and export controls has impacted and may in the future impact demand for our products or services, negatively impacting our business and financial results. Reduced demand due to export controls could also lead to excess inventory or cause us to incur related supply charges. 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. Regulators in China have inquired about our sales and our efforts to supply the China market, and if they conclude that we have violated any applicable law in China or the commitments we entered at the close of our Mellanox acquisition, this could subject us to various penalties or restrictions on our ability to conduct our business, any of which could have a material and adverse impact on our business, operating results and financial condition.

During the third quarter of fiscal year 2023, the USG announced 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. The licensing 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. During the second quarter of fiscal year 2024, the USG also informed us of an additional licensing requirement for a subset of A100 and H100 products destined to certain customers and other regions, including some countries in the Middle East.

On October 17, 2023, the USG announced new and updated licensing requirements effective in our fourth quarter of fiscal year 2024 for exports to China and Country Groups D1, D4, and D5 (including but not limited to Saudi Arabia, the United Arab Emirates, and Vietnam, but excluding Israel) of our products exceeding certain performance thresholds, including A100, A800, H100, H800, L4, L40, L40S and RTX 4090. The licensing requirements also apply to the export of products exceeding certain performance thresholds to a party headquartered in, or with an ultimate parent headquartered in, Country Group D5, including China. On October 23, 2023, the USG informed us the licensing requirements were effective immediately for shipments of our A100, A800, H100, H800, and L40S products.

Following these export controls, we transitioned some operations, including certain testing, validation, and supply and distribution operations out of China and Hong Kong. Any future transitions 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 are working to expand our Data Center product portfolio to offer new regulation-compliant solutions, including those for which the USG does not wish to have any advance notice before each shipment. To the extent that a customer requires products covered by the licensing requirements, we may seek a license for the customer but have no assurance that the USG will grant such a license, or that the USG will act on the license application in a timely manner or at all. The USG is evaluating license requests in a non-public process that does not have clear standards or an opportunity for review. The requirements have a disproportionate impact on NVIDIA and already have disadvantaged and may in the future 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 competitive position has been harmed, and our competitive position and future results may be further harmed, over the long-term, if there are further changes in the USG's export controls, including further expansion of the geographic, customer, or product scope of the controls, 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. 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 licensing 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.

Given the increasing strategic importance of AI and rising geopolitical tensions, the USG has changed and may again change the export control rules at any time and further subject a wider range of our products to export restrictions and licensing requirements, negatively impacting our business and financial results. In the event of such change, we may be unable to sell our inventory of such products and may be unable to develop replacement products not subject to the licensing requirements, effectively excluding us from all or part of the China market, as well as other impacted markets, including the Middle East. For example, the USG is seeking to impose conditions to limit the ability of foreign firms to create and offer as a service large-scale GPU clusters, for example by requiring chip tracking and throttling mechanisms that would disable or impair GPUs if certain system or use conditions are detected. The USG has already imposed export controls restricting certain gaming GPUs, and if the USG expands such controls to restrict additional gaming products, it may disrupt a significant portion of our supply and distribution chain and negatively impact sales of such products to markets outside China, including the U.S. and Europe. Export controls may disrupt our supply and distribution chain for a substantial portion of our products, which are warehoused in and distributed from Hong Kong. Export controls restricting our ability to sell datacenter GPUs may also negatively impact demand for our networking products used in servers containing our GPUs. The USG may also impose export controls on our networking products, such as high-speed network interconnects, to limit the ability of downstream parties to create large clusters for frontier model training. Any new control that impacts a wider range of our products would likely have a disproportionate impact on NVIDIA and may disadvantage us against certain of our competitors that sell chips that are outside the scope of such control. Excessive or shifting export controls have already and may in the future encourage customers outside China and other impacted regions to "design-out" certain U.S. semiconductors from their products to reduce the compliance burden and risk, and to ensure that they are able to serve markets worldwide. As a result, excessive or shifting export controls may negatively impact demand for our products and services not only in China, but also in other markets, such as Europe, Latin America, and Southeast Asia. Excessive or shifting export controls increase the risk of investing in U.S. advanced semiconductor products, because by the time a new product is ready for market, it may be subject to new unilateral export controls restricting its sale. At the same time, such controls may increase investment in foreign competitors, which would be less likely to be restricted by U.S. controls.

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. The Chinese government may impose restrictions on the sale to certain End Customers of our products, or any products containing components made by our partners and suppliers. For example, the Chinese government announced restrictions relating to certain sales of products containing certain products made by Micron, a supplier of ours. Further restrictions on our products or the products of our suppliers could negatively impact our business and financial results.

Finally, our business depends on our ability to receive consistent and reliable supply from our overseas partners, especially in Taiwan. Any new restrictions that negatively impact our ability to receive supply of components, parts, or services from Taiwan, would negatively impact our business and financial results.

Issues relating to the responsible use of our technologies, including AI in our offerings, may result in reputational or 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 or 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, and we also offer stand-alone AI applications. AI poses emerging legal, social, and 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. Complying with multiple regulations from different jurisdictions related to AI could increase our cost of doing business, may change the way that we operate in certain jurisdictions, or may impede our ability to offer certain products and services in certain jurisdictions if we are unable to comply with regulations. Compliance with government regulation of AI, including under proposed legislation regulating AI in jurisdictions such as the European Union as well as under any U.S. regulation adopted in response to the Biden administration's Executive Order on AI, may also increase the cost of related research and development, and create additional reporting and/or transparency requirements. For example, regulation adopted in response to the Executive Order on AI could require us to notify the USG of certain safety test results and other information. Furthermore, 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 and regulation 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 or financial harm.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES, USE OF PROCEEDS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Issuer Purchases of Equity Securities

During the third quarter and first nine months of fiscal year 2024, we repurchased 8.3 million and 15.9 million shares of our common stock for $3.72 billion and $7.01 billion, respectively. On August 21, 2023, our Board of Directors approved an increase to our share repurchase program of an additional $25.00 billion, without expiration. As of October 29, 2023, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $25.24 billion.

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 the third quarter and first nine months of fiscal year 2024, we paid $99 million and $296 million, respectively, in 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 third quarter of fiscal year 2024:

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)
July 31, 2023 - August 27, 2023	2.2	$ 444.16	2.2	$ 27.95
August 28, 2023 - September 24, 2023	2.6	$ 456.81	2.6	$ 26.78
September 25, 2023 - October 29, 2023	3.5	$ 436.44	3.5	$ 25.24
Total	8.3		8.3	

From October 30, 2023 through November 17, 2023, we repurchased 0.8 million shares for $366 million pursuant to a Rule 10b5-1 trading plan

Restricted Stock Unit Share Withholding

We also withhold common stock shares associated with net share settlements to cover tax withholding obligations upon the vesting of RSU awards under our employee equity incentive program. During the third quarter and first nine months of fiscal year 2024, we withheld approximately 2 million and 5 million shares, respectively, for a total value of $764 million and $1.94 billion, respectively.

ITEM 5. OTHER INFORMATION

On August 27, 2023, Debora Shoquist, Executive Vice President, Operations, adopted a trading arrangement that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) for the sale through November 29, 2024 of up to 81,500 shares of our common stock.

On October 6, 2023, Donald Robertson, Vice President and Chief Accounting Officer, adopted a trading arrangement that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) for the sale through December 18, 2025 of up to 3,500 shares of our common stock.

ITEM 6. EXHIBITS

Exhibit No.	Exhibit Description
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*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE*	Inline 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.

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 Quarterly Report on Form 10-Q 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.

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.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 21, 2023

NVIDIA Corporation

By: /s/ Colette M. Kress

Colette M. Kress

Executive Vice President and Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION

I, Jen-Hsun Huang, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 21, 2023

/s/JEN-HSUN HUANG
Jen-Hsun Huang
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Colette M. Kress, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 21, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Jen-Hsun Huang, the President and Chief Executive Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended October 29, 2023, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: November 21, 2023

/s/JEN-HSUN HUANG

Jen-Hsun Huang
President and Chief Executive Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

EXHIBIT 32.2

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Colette M. Kress, the Executive Vice President and Chief Financial Officer of NVIDIA Corporation (the “Company”), hereby certifies that, to the best of her knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended October 29, 2023, to which this Certification is attached as Exhibit 32.2 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Date: November 21, 2023

/s/ COLETTE M. KRESS
Colette M. Kress
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of 18 U.S.C. § 1350 has been provided to NVIDIA Corporation and will be retained by NVIDIA Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.