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 26, 2020

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 August 14, 2020, was 617 million.

NVIDIA CORPORATION
FORM 10-Q
FOR THE QUARTER ENDED July 26, 2020

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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.

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 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
Revenue	$ 3,866	$ 2,579	$ 6,946	$ 4,799
Cost of revenue	1,591	1,038	2,667	1,962
Gross profit	2,275	1,541	4,279	2,837
Operating expenses				
Research and development	997	704	1,732	1,379
Sales, general and administrative	627	266	920	529
Total operating expenses	1,624	970	2,652	1,908
Income from operations	651	571	1,627	929
Interest income	13	47	44	92
Interest expense	(54)	(13)	(78)	(27)
Other, net	(1)	1	(2)	1
Other income (expense), net	(42)	35	(36)	66
Income before income tax	609	606	1,591	995
Income tax expense (benefit)	(13)	54	52	48
Net income	$ 622	$ 552	$ 1,539	$ 947
Net income per share:				
Basic	$ 1.01	$ 0.91	$ 2.50	$ 1.56
Diluted	$ 0.99	$ 0.90	$ 2.47	$ 1.54
Weighted average shares used in per share computation:				
Basic	616	609	615	608
Diluted	626	616	624	616

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 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
Net income	$ 622	$ 552	$ 1,539	$ 947
Other comprehensive income, net of tax				
Available-for-sale securities:				
Net change in unrealized gain	3	1	3	9
Reclassification adjustments for net realized gain (loss) included in net income	(2)	—	(2)	—
Net change in unrealized gain	1	1	1	9
Cash flow hedges:				
Net unrealized gain	16	—	6	4
Reclassification adjustments for net realized gain (loss) included in net income	(3)	—	(4)	(2)
Net change in unrealized gain	13	—	2	2
Other comprehensive income, net of tax	14	1	3	11
Total comprehensive income	$ 636	$ 553	$ 1,542	$ 958

See accompanying Notes to Condensed Consolidated Financial Statements.

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

	July 26, 2020	January 26, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,274	$ 10,896
Marketable securities	7,707	1
Accounts receivable, net	2,084	1,657
Inventories	1,401	979
Prepaid expenses and other current assets	215	157
Total current assets	14,681	13,690
Property and equipment, net	1,964	1,674
Operating lease assets	701	618
Goodwill	4,193	618
Intangible assets, net	2,854	49
Deferred income tax assets	630	548
Other assets	157	118
Total assets	$ 25,180	$ 17,315
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 893	$ 687
Accrued and other current liabilities	1,517	1,097
Total current liabilities	2,410	1,784
Long-term debt	6,960	1,991
Long-term operating lease liabilities	611	561
Other long-term liabilities	1,285	775
Total liabilities	11,266	5,111
Commitments and contingencies - see Note 13		
Shareholders' equity:		
Preferred stock	—	—
Common stock	1	1
Additional paid-in capital	7,828	7,045
Treasury stock, at cost	(10,232)	(9,814)
Accumulated other comprehensive income	4	1
Retained earnings	16,313	14,971
Total shareholders' equity	13,914	12,204
Total liabilities and shareholders' equity	$ 25,180	$ 17,315

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE THREE MONTHS ENDED JULY 26, 2020 AND JULY 28, 2019
(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, April 26, 2020	615	$ 1	$ 7,354	$ (10,036)	$ (10)	$ 15,790	$ 13,099
Net income	—	—	—	—	—	622	622
Other comprehensive income	—	—	—	—	14	—	14
Issuance of common stock from stock plans	3	—	6	—	—	—	6
Tax withholding related to vesting of restricted stock units	(1)	—	—	(196)	—	—	(196)
Cash dividends declared and paid ($0.16 per common share)	—	—	—	—	—	(99)	(99)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	86	—	—	—	86
Stock-based compensation	—	—	382	—	—	—	382
Balances, July 26, 2020	617	$ 1	$ 7,828	$ (10,232)	$ 4	$ 16,313	$ 13,914
Balances, April 28, 2019	609	$ 1	$ 6,317	$ (9,474)	$ (2)	$ 12,862	$ 9,704
Net income	—	—	—	—	—	552	552
Other comprehensive income	—	—	—	—	1	—	1
Tax withholding related to vesting of restricted stock units	—	—	—	(50)	—	—	(50)
Cash dividends declared and paid ($0.16 per common share)	—	—	—	—	—	(97)	(97)
Stock-based compensation	—	—	226	—	—	—	226
Balances, July 28, 2019	609	$ 1	$ 6,543	$ (9,524)	$ (1)	$ 13,317	$ 10,336

See accompanying Notes to Condensed Consolidated Financial Statements.

NVIDIA CORPORATION AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE SIX MONTHS ENDED JULY 26, 2020 AND JULY 28, 2019
(Unaudited)

	Common Stock Outstanding		Additional Paid-in	Treasury	Accumulated Other Comprehensive	Retained	Total Shareholders'
(In millions, except per share data)	**Shares**	**Amount**	**Capital**	**Stock**	**Income (Loss)**	**Earnings**	**Equity**
Balances, January 26, 2020	612	$ 1	$ 7,045	$ (9,814)	$ 1	$ 14,971	$ 12,204
Net income	—	—	—	—	—	1,539	1,539
Other comprehensive income	—	—	—	—	3	—	3
Issuance of common stock from stock plans	7	—	94	—	—	—	94
Tax withholding related to vesting of restricted stock units	(2)	—	—	(418)	—	—	(418)
Cash dividends declared and paid ($0.32 per common share)	—	—	—	—	—	(197)	(197)
Fair value of partially vested equity awards assumed in connection with acquisitions	—	—	86	—	—	—	86
Stock-based compensation	—	—	603	—	—	—	603
Balances, July 26, 2020	617	$ 1	$ 7,828	$ (10,232)	$ 4	$ 16,313	$ 13,914
Balances, January 27, 2019	606	$ 1	$ 6,051	$ (9,263)	$ (12)	$ 12,565	$ 9,342
Net income	—	—	—	—	—	947	947
Other comprehensive income	—	—	—	—	11	—	11
Issuance of common stock from stock plans	5	—	83	—	—	—	83
Tax withholding related to vesting of restricted stock units	(2)	—	—	(261)	—	—	(261)
Cash dividends declared and paid ($0.32 per common share)	—	—	—	—	—	(195)	(195)
Stock-based compensation	—	—	409	—	—	—	409
Balances, July 28, 2019	609	$ 1	$ 6,543	$ (9,524)	$ (1)	$ 13,317	$ 10,336

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 26, 2020	July 28, 2019
Cash flows from operating activities:		
Net income	$ 1,539	$ 947
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation expense	598	401
Depreciation and amortization	511	183
Deferred income taxes	(64)	(27)
Other	(5)	1
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(205)	(137)
Inventories	(97)	378
Prepaid expenses and other assets	34	36
Accounts payable	63	(45)
Accrued and other current liabilities	81	(79)
Other long-term liabilities	21	(2)
Net cash provided by operating activities	2,476	1,656
Cash flows from investing activities:		
Proceeds from maturities of marketable securities	1,032	3,592
Proceeds from sales of marketable securities	259	3,152
Purchases of marketable securities	(8,286)	(1,461)
Acquisition of businesses, net of cash acquired	(7,171)	—
Purchases of property and equipment and intangible assets	(372)	(241)
Investments and other, net	(7)	(2)
Net cash provided by (used in) investing activities	(14,545)	5,040
Cash flows from financing activities:		
Issuance of debt, net of issuance costs	4,971	—
Proceeds related to employee stock plans	94	83
Payments related to tax on restricted stock units	(418)	(261)
Dividends paid	(197)	(195)
Other	(3)	—
Net cash provided by (used in) financing activities	4,447	(373)
Change in cash and cash equivalents	(7,622)	6,323
Cash and cash equivalents at beginning of period	10,896	782
Cash and cash equivalents at end of period	$ 3,274	$ 7,105
Other non-cash investing activity:		
Assets acquired by assuming related liabilities	$ 257	$ 80

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 26, 2020 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 26, 2020, 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 26, 2020.

The unaudited condensed consolidated financial statements in this report include the financial results of Mellanox Technologies Ltd., or Mellanox, prospectively from April 27, 2020. For additional details, refer to Note 2 - Business Combination.

Significant Accounting Policies

Except for the accounting policies for business combination and investment in non-affiliated entities, 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 26, 2020.

Business Combination

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

We initially capitalize the fair value of IPR&D as an intangible asset with an indefinite life. We assess for impairment thereafter. When IPR&D projects are completed, we reclassify the IPR&D as an amortizable purchased intangible asset and amortize over the asset's estimated useful life.

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

Investment in Non-Affiliated Entities

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

Fiscal Year

We operate on a 52- or 53-week year, ending on the last Sunday in January. Fiscal year 2021 is a 53-week year and fiscal year 2020 is a 52-week year. The second quarters of fiscal years 2021 and 2020 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, and other contingencies. The inputs into our judgments and estimates consider the economic implications of COVID-19 on our critical and significant accounting estimates. These estimates are based on historical facts and various other assumptions that we believe are reasonable.

Adoption of New and Recently Issued Accounting Pronouncements

Recently Adopted Accounting Pronouncement

In June 2016, the Financial Accounting Standards Board issued a new accounting standard to replace the existing incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates for accounts receivable and other financial instruments, including available-for-sale debt securities. We adopted the standard in the first quarter of fiscal year 2021 and the impact of the adoption was not material to our consolidated financial statements.

Note 2 - Business Combination

On April 27, 2020, we completed the acquisition of all outstanding shares of Mellanox for a total purchase consideration of $7.13 billion. Mellanox is a supplier of high-performance interconnect products for computing, storage and communications applications. We acquired Mellanox to optimize data center workloads to scale across the entire computing, networking, and storage stack.

Preliminary Purchase Price Allocation

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

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

(1) Represents the cash consideration of $125.00 per share paid to Mellanox shareholders for approximately 56 million shares of outstanding Mellanox ordinary shares.
(2) Represents the cash consideration for the settlement of approximately 249 thousand Mellanox stock options held by employees and non-employee directors of Mellanox.
(3) Represents the fair value of Mellanox's stock-based compensation awards attributable to pre-combination services.

We allocated the purchase price to tangible and identified intangible assets acquired and liabilities assumed based on the preliminary estimates of their estimated fair values, which were determined using generally accepted valuation techniques based on estimates and assumptions made by management at the time of the acquisition and are subject to change during the measurement period which is not expected to exceed one year. The primary tasks that are required to be completed include validation of business level forecasts, jurisdictional forecasts, customer attrition rates, contingent liabilities assessments and any related tax impacts from the acquisition. Any adjustments to our preliminary purchase price allocation identified during the measurement period will be recognized in the period in which the adjustments are determined.

The goodwill is primarily attributable to the planned growth in the combined business of NVIDIA and Mellanox. Goodwill is not amortized to earnings, but instead is reviewed for impairment at least annually, absent any interim indicators of impairment. Goodwill recognized in the acquisition is not expected to be deductible for foreign tax purposes. Goodwill arising from the Mellanox acquisition has been allocated to the Compute and Networking segment. Refer to Note 15 – Segment Information for further details on segments.

The operating results of Mellanox have been included in our condensed consolidated financial statements for the second quarter of fiscal year 2021 from the acquisition date. Revenue attributable to Mellanox was approximately 14% of consolidated revenue. There is not a practical way to determine net income attributable to Mellanox due to integration.

Acquisition-related costs of $26 million were included in selling, general and administrative expense for the first half of fiscal year 2021.

Intangible Assets

The estimated fair value and weighted average useful life of the acquired intangible assets are as follows:

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

(1) The fair value of developed technology was identified using the Multi-Period Excess Earning Method.
(2) Customer relationships represent the fair value of the existing relationships using the With and Without Method.
(3) Order backlog represents primarily the fair value of purchase arrangements with customers using the Multi-Period Excess Earning Method.
(4) Trade names primarily relate to Mellanox trade names and fair value was determined by applying the Relief-from-Royalty Method under the income approach.
(5) The fair value of IPR&D was determined using the Multi-Period Excess Earning Method.

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

Mellanox had an IPR&D project associated with the next generation interconnect product that had not yet reached technological feasibility as of the acquisition date. Accordingly, we recorded an indefinite-lived intangible asset of $630 million for the fair value of this project, which will initially not be amortized. Instead, the project will be tested for impairment whenever events or changes in circumstances indicate that the project may be impaired or may have reached technological feasibility. Once the project reaches technological feasibility, we will begin to amortize the intangible asset over its estimated useful life.

Supplemental Unaudited Pro Forma Information

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

	Pro Forma			
	Three Months Ended		Six Months Ended	
	July 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
	(In millions)			
Revenue	$ 3,866	$ 2,889	$ 7,375	$ 5,415
Net income	$ 964	$ 411	$ 1,883	$ 404

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

The pro forma results reflect the inventory step-up expense of $161 million in the first half of fiscal year 2020 and were excluded from the pro forma results for the second quarter and first half of fiscal year 2021. There were no other material nonrecurring adjustments.

Note 3 - Leases

Our lease obligations primarily consist of operating leases for our headquarters complex, domestic and international office facilities, and data center space, with lease periods expiring between fiscal years 2021 and 2035.

Future minimum lease payments under our non-cancelable operating leases as of July 26, 2020, are as follows:

	Operating Lease Obligations
	(In millions)
Fiscal Year:	
2021 (excluding first half of fiscal year 2021)	$ 74
2022	139
2023	119
2024	99
2025	80
2026 and thereafter	344
Total	855
Less imputed interest	120
Present value of net future minimum lease payments	735
Less short-term operating lease liabilities	124
Long-term operating lease liabilities	$ 611

Operating lease expense was $35 million and $28 million for the second quarter of fiscal years 2021 and 2020, respectively, and $67 million and $55 million for the first half of fiscal years 2021 and 2020, respectively. Short-term and variable lease expenses for the second quarter and first half of fiscal years 2021 and 2020 were not significant.

Other information related to leases was as follows:

	Six Months Ended	
	July 26, 2020	July 28, 2019
	(In millions)	
Supplemental cash flows information		
Operating cash flows used for operating leases	$ 66	$ 50
Operating lease assets obtained in exchange for lease obligations (1)	$ 138	$ 108

(1) The first half of fiscal year 2021 includes $80 million of operating lease assets addition due to a business combination.

As of July 26, 2020, our operating leases had a weighted average remaining lease term of 8.0 years and a weighted average discount rate of 3.08%. As of January 26, 2020, our operating leases had a weighted average remaining lease term of 8.3 years and a weighted average discount rate of 3.45%.

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 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
	(In millions)			
Cost of revenue	$ 14	$ 8	$ 35	$ 12
Research and development	228	145	362	259
Sales, general and administrative	132	71	201	130
Total	$ 374	$ 224	$ 598	$ 401

Equity Award Activity

The following is a summary of 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 26, 2020	14	$ 176.72
Granted	8	$ 291.89
Vested restricted stock	(5)	$ 149.90
Balances, July 26, 2020	17	$ 239.22

As of July 26, 2020, there was $3.60 billion of aggregate unearned stock-based compensation expense, net of forfeitures. This amount is expected to be recognized over a weighted average period of 2.8 years for RSUs, PSUs, and market-based PSUs, and 0.9 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		Six Months Ended	
	July 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
	(In millions, except per share data)			
Numerator:				
Net income	$ 622	$ 552	$ 1,539	$ 947
Denominator:				
Basic weighted average shares	616	609	615	608
Dilutive impact of outstanding equity awards	10	7	9	8
Diluted weighted average shares	626	616	624	616
Net income per share:				
Basic (1)	$ 1.01	$ 0.91	$ 2.50	$ 1.56
Diluted (2)	$ 0.99	$ 0.90	$ 2.47	$ 1.54
Equity awards excluded from diluted net income per share because their effect would have been anti-dilutive	—	11	6	12

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

Note 6 – Income Taxes

We recognized an income tax benefit of $13 million and an income tax expense of $52 million for the second quarter and first half of fiscal year 2021, respectively, and an income tax expense of $54 million and $48 million for the second quarter and first half of fiscal year 2020, respectively. The income tax benefit as a percentage of income before income tax was 2.0% for the second quarter of fiscal year 2021. The income tax expense as a percentage of income before income tax was 3.3% for the first half of fiscal year 2021, and 8.8% and 4.9% for the second quarter and first half of fiscal year 2020, respectively.

The decrease in our effective tax rate for the second quarter and first half of fiscal year 2021 as compared to the same periods of fiscal year 2020 was primarily due to a decrease in the proportional amount of earnings subject to United States tax and an increase of tax benefits from stock-based compensation and the U.S. federal research tax credit.

Our effective tax rates for the first half of fiscal years 2021 and 2020 were lower than the U.S. federal statutory rate of 21% due to income earned in jurisdictions that are subject to taxes lower than the U.S. federal statutory tax rate, tax benefits related to stock-based compensation, and the benefit of the U.S. federal research tax credit.

During the second quarter of fiscal year 2021, we completed the acquisition of Mellanox. As a result of the acquisition, we recorded $256 million of net deferred tax liabilities primarily on the excess of book basis over the tax basis of the acquired intangible assets and undistributed earnings in certain foreign subsidiaries. We also recorded $153 million of long-term tax liabilities related to tax basis differences in Mellanox. The net deferred tax liabilities and long-term tax liabilities are based upon certain assumptions underlying our purchase price allocation. Upon finalization of the purchase price allocation, additional adjustments to the amount of our net deferred taxes and long-term tax liabilities may be required.

As of July 26, 2020, we intend to indefinitely reinvest approximately $675 million of cumulative undistributed earnings held by Mellanox non-U.S. subsidiaries. We have not provided the amount of unrecognized deferred tax liabilities for temporary differences related to investments in Mellanox non-U.S. subsidiaries as the determination of such amount is not practicable.

For the first half of fiscal year 2021, there have been 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. In the second quarter of fiscal year 2021, we assumed $59 million of unrecognized tax benefits and $4 million of related interest through the Mellanox acquisition. Other than these amounts, there have been no material changes to our unrecognized tax benefits and any related interest or penalties since the fiscal year ended January 26, 2020.

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 26, 2020, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next twelve months.

Note 7 - Cash Equivalents and Marketable Securities

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

The following is a summary of cash equivalents and marketable securities as of July 26, 2020 and January 26, 2020:

	July 26, 2020					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Corporate debt securities	$ 3,494	$ 3	$ —	$ 3,497	$ 515	$ 2,982
Debt securities issued by United States government agencies	2,101	1	—	2,102	50	2,052
Money market funds	2,053	—	—	2,053	2,053	—
Debt securities issued by the United States Treasury	1,956	—	—	1,956	—	1,956
Certificates of deposit	893	—	—	893	342	551
Foreign government bonds	256	—	—	256	90	166
Total	$ 10,753	$ 4	$ —	$ 10,757	$ 3,050	$ 7,707

	January 26, 2020					
					Reported as	
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value	Cash Equivalents	Marketable Securities
	(In millions)					
Money market funds	$ 7,507	$ —	$ —	$ 7,507	$ 7,507	$ —
Debt securities issued by the United States Treasury	1,358	—	—	1,358	1,358	—
Debt securities issued by United States government agencies	1,096	—	—	1,096	1,096	—
Corporate debt securities	592	—	—	592	592	—
Foreign government bonds	200	—	—	200	200	—
Certificates of deposit	27	—	—	27	27	—
Asset-backed securities	1	—	—	1	—	1
Total	$ 10,781	$ —	$ —	$ 10,781	$ 10,780	$ 1

Net realized gains and unrealized 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 July 26, 2020 and January 26, 2020 are shown below by contractual maturity.

	July 26, 2020		January 26, 2020	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(In millions)			
Less than one year	$ 10,027	$ 10,028	$ 10,781	$ 10,781
Due in 1 - 5 years	726	729	—	—
Total	$ 10,753	$ 10,757	$ 10,781	$ 10,781

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.

		Fair Value at			
	Pricing Category	**July 26, 2020**		**January 26, 2020**	
		(In millions)			
Assets					
Cash equivalents and marketable securities:					
Money market funds	Level 1	$	2,053	$	7,507
Corporate debt securities	Level 2	$	3,497	$	592
Debt securities issued by United States government agencies	Level 2	$	2,102	$	1,096
Debt securities issued by the United States Treasury	Level 2	$	1,956	$	1,358
Certificates of deposit	Level 2	$	893	$	27
Foreign government bonds	Level 2	$	256	$	200
Other asset:					
Investment in non-affiliated entities (1)	Level 3	$	110	$	77
Liabilities					
Other non-current liabilities:					
2.20% Notes Due 2021 (2)	Level 2	$	1,019	$	1,006
3.20% Notes Due 2026 (2)	Level 2	$	1,139	$	1,065
2.85% Notes Due 2030 (2)	Level 2	$	1,684	$	—
3.50% Notes Due 2040 (2)	Level 2	$	1,211	$	—
3.50% Notes Due 2050 (2)	Level 2	$	2,432	$	—
3.70% Notes Due 2060 (2)	Level 2	$	637	$	—

(1) Investment in non-affiliated entities is privately held and recorded at fair value on a non-recurring basis only if an impairment or observable price adjustment occurs in the period with changes in fair value recorded through net income. The amount recorded as of July 26, 2020 has not been significant.

(2) These liabilities are carried on our Consolidated Balance Sheets at their original issuance value, net of unamortized debt discount and issuance costs, and are not marked to fair value each period. Refer to Note 12 of these Notes to Condensed Consolidated Financial Statements for additional information.

Note 9 - Amortizable Intangible Assets

The components of our amortizable intangible assets are as follows:

	July 26, 2020			January 26, 2020		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
			(In millions)			
Acquisition-related intangible assets (1)	$ 3,287	$ (474)	$ 2,813	$ 195	$ (192)	$ 3
Patents and licensed technology	524	(483)	41	520	(474)	46
Total intangible assets	$ 3,811	$ (957)	$ 2,854	$ 715	$ (666)	$ 49

(1) As of July 26, 2020, acquisition-related intangible assets include the fair value of a Mellanox IPR&D project of $630 million, which initially will not be amortized. Once the project reaches technological feasibility, we will begin to amortize the intangible asset over its estimated useful life. Refer to Note 2 of these Notes to Condensed Consolidated Financial Statements for further details.

Amortization expense associated with intangible assets was $284 million and $291 million for the second quarter and first half of fiscal year 2021, respectively, and $6 million and $13 million for the second quarter and first half of fiscal year 2020, respectively. Future amortization expense related to the net carrying amount of intangible assets as of July 26, 2020 is estimated to be $316 million for the remainder of fiscal year 2021, $532 million in fiscal year 2022, $529 million in fiscal year 2023, $407 million in fiscal year 2024, $354 million in fiscal year 2025, and $716 million in fiscal year 2026 and thereafter. Refer to Note 2 of these Notes to Condensed Consolidated Financial Statements for further details on acquisition-related intangible assets.

Note 10 - Balance Sheet Components

Certain balance sheet components are as follows:

	July 26, 2020	January 26, 2020
Inventories:	(In millions)	
Raw materials	$ 320	$ 249
Work in-process	516	265
Finished goods	565	465
Total inventories	$ 1,401	$ 979

	July 26, 2020	January 26, 2020
Accrued and Other Current Liabilities:	*(In millions)*	
Customer program accruals	$ 506	$ 462
Accrued payroll and related expenses	322	185
Deferred revenue (1)	222	141
Operating leases	124	91
Licenses and royalties	101	66
Coupon interest on debt obligations	74	20
Taxes payable	52	61
Product warranty and return provisions	31	24
Professional service fee	20	18
Other	65	29
Total accrued and other current liabilities	$ 1,517	$ 1,097

(1) Deferred revenue primarily includes customer advances and deferrals related to license and development arrangements and post contract customer support, or PCS.

	July 26, 2020	January 26, 2020
Other Long-Term Liabilities:	*(In millions)*	
Income tax payable (1)	$ 721	$ 528
Deferred income tax (2)	274	29
Deferred revenue (3)	120	60
Licenses payable	89	110
Employee benefits	38	22
Other	43	26
Total other long-term liabilities	$ 1,285	$ 775

(1) As of July 26, 2020, income tax payable represents the long-term portion of the one-time transition tax payable of $284 million, unrecognized tax benefits of $245 million, related interest and penalties of $41 million, and other foreign long-term tax payable of $151 million.

(2) Deferred income tax primarily relates to acquired intangible assets.

(3) Deferred revenue primarily includes deferrals related to PCS.

Deferred Revenue

The following table shows the changes in deferred revenue during the first half of fiscal years 2021 and 2020:

	July 26, 2020	July 28, 2019
	(In millions)	
Balance at beginning of period	$ 201	$ 138
Deferred revenue added during the period	213	161
Addition due to business combinations	75	—
Revenue recognized during the period	(147)	(118)
Balance at end of period	$ 342	$ 181

Revenue related to remaining performance obligations represents the remaining contracted license, development arrangements and PCS that has not been recognized. This includes related deferred revenue currently recorded and amounts that will be invoiced in future periods. As of July 26, 2020, the amount of our remaining performance obligations that has not been recognized as revenue was $670 million, of which we expect to recognize approximately 40% as revenue over the next twelve months and the remainder thereafter. This amount excludes the value of remaining performance obligations for contracts with an original expected 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 July 26, 2020 and January 26, 2020.

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, including intercompany hedging instruments, or intercompany derivatives, with wholly-owned subsidiaries in order to hedge certain forecasted expenses 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 July 26, 2020 and January 26, 2020:

	July 26, 2020	January 26, 2020
	(In millions)	
Designated as cash flow hedges	$ 575	$ 428
Not designated for hedge accounting	$ 373	$ 287

As of July 26, 2020, all designated foreign currency forward contracts mature within eighteen 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 2021 and 2020, 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. Therefore, there were no gains or losses associated with ineffectiveness.

Note 12 - Debt

Long-Term Debt

In March 2020, we issued $1.50 billion of the 2.85% Notes Due 2030, $1.00 billion of the 3.50% Notes Due 2040, $2.00 billion of the 3.50% Notes Due 2050, and $500 million of the 3.70% Notes Due 2060, or collectively, the March 2020 Notes. Interest on the March 2020 Notes is payable on April 1 and October 1 of each year, beginning on October 1, 2020. Upon 30 days' notice to holders of the Notes, we may redeem the Notes for cash prior to maturity, at redemption prices that include accrued and unpaid interest, if any, and a make-whole premium. However, no make-whole premium will be paid for redemptions of the Notes Due 2030 on or after January 1, 2030, the Notes Due 2040 on or after October 1, 2039, the Notes Due 2050 on or after October 1, 2049, or the Notes Due 2060 on or after October 1, 2059. The net proceeds from the March 2020 Notes were $4.97 billion, after deducting debt discount and estimated issuance costs.

In September 2016, we issued $1.00 billion of the 2.20% Notes Due 2021 and $1.00 billion of the 3.20% Notes Due 2026, or collectively, the September 2016 Notes. Interest on the September 2016 Notes is payable on March 16 and September 16 of each year. Upon 30 days' notice to holders of the Notes, we may redeem the Notes for cash prior to maturity, at redemption prices that include accrued and unpaid interest, if any, and a make-whole premium. However, no make-whole premium will be paid for redemptions of the Notes Due 2021 on or after August 16, 2021, or for redemptions of the Notes Due 2026 on or after June 16, 2026. The net proceeds from the September 2016 Notes were $1.98 billion, after deducting debt discount and issuance costs.

Both the September 2016 Notes and the March 2020 Notes, or collectively, the Notes, are our unsecured senior obligations and rank equally in right of payment with all existing and future unsecured and unsubordinated indebtedness. The Notes are structurally subordinated to the liabilities of our subsidiaries and are effectively subordinated to any secured indebtedness to the extent of the value of the assets securing such indebtedness. All existing and future liabilities of our subsidiaries will be effectively senior to the Notes.

The carrying value of the Notes and the associated interest rates were as follows:

	Expected Remaining Term (years)	Effective Interest Rate	July 26, 2020	January 26, 2020
			(In millions)	
2.20% Notes Due 2021	1.1	2.38%	$ 1,000	$ 1,000
3.20% Notes Due 2026	6.1	3.31%	1,000	1,000
2.85% Notes Due 2030	9.7	2.93%	1,500	—
3.50% Notes Due 2040	19.7	3.54%	1,000	—
3.50% Notes Due 2050	29.7	3.54%	2,000	—
3.70% Notes Due 2060	39.7	3.73%	500	—
Unamortized debt discount and issuance costs			(40)	(9)
Net carrying amount			$ 6,960	$ 1,991

As of July 26, 2020, we were in compliance with the required covenants under the Notes.

Revolving Credit Facility

We have a Credit Agreement under which we may borrow up to $575 million for general corporate purposes and can obtain revolving loan commitments up to $425 million. As of July 26, 2020, we had not borrowed any amounts and were in compliance with the required covenants under this agreement.

Commercial Paper

We have a $575 million commercial paper program to support general corporate purposes. As of July 26, 2020, we had not issued any commercial paper.

Note 13 - Commitments and Contingencies

Purchase Obligations

As of July 26, 2020, we had outstanding inventory purchase obligations totaling $2.04 billion and other purchase obligations totaling $310 million.

Accrual for Product Warranty Liabilities

The estimated amount of product returns and warranty liabilities was $19 million and $15 million as of July 26, 2020 and January 26, 2020, respectively, and the activities related to the warranty liabilities were not significant.

In connection with certain agreements that we have entered in the past, we have provided indemnities to cover the indemnified party 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

On December 21, 2018, a purported securities class action lawsuit was filed in the United States District Court for the Northern District of California, captioned Iron Workers Joint Funds v. Nvidia Corporation, et al. (Case No. 18-cv-7669), naming as defendants NVIDIA and certain of NVIDIA's officers. On December 28, 2018, a substantially similar purported securities class action was commenced in the Northern District of California, captioned Oto v. Nvidia Corporation, et al. (Case No. 18-cv-07783), naming the same defendants, and seeking substantially similar relief. On February 19, 2019, a number of shareholders filed motions to consolidate the two cases and to be appointed lead plaintiff and for their respective counsel to be appointed lead counsel. On March 12, 2019, the two cases were consolidated under case number 4:18-cv-07669-HSG and titled In Re NVIDIA Corporation Securities Litigation. On May 2, 2019, the Court appointed lead plaintiffs and lead counsel. On June 21, 2019, the lead plaintiffs filed a consolidated class action complaint. The consolidated complaint asserts that the defendants 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. The plaintiffs also allege that the NVIDIA executives who they named as defendants violated Section 20(a) of the Exchange Act. The plaintiffs seek 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 August 2, 2019, NVIDIA moved to dismiss the consolidated class action complaint on the basis that plaintiffs failed to state any claims for violations of the securities laws by NVIDIA or the named defendants. On March 16, 2020, the Court issued an order dismissing the consolidated class action complaint with leave to amend. The plaintiffs filed an amended complaint on May 13, 2020. On June 29, 2020, NVIDIA moved to dismiss the amended complaint on the basis that plaintiffs failed to state any claims for violations of the securities laws by NVIDIA or the named defendants.

On January 18, 2019, a shareholder, purporting to act on behalf of NVIDIA, filed a derivative lawsuit in the Northern District of California, captioned Han v. Huang, et al. (Case No. 19-cv-00341), seeking to assert claims on behalf of NVIDIA against the members of NVIDIA's board of directors and certain officers. The lawsuit asserts claims 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 plaintiff is seeking unspecified damages and other relief, including reforms and improvements to NVIDIA's corporate governance and internal procedures. On February 12, 2019, a substantially similar derivative lawsuit was filed in the Northern District of California captioned Yang v. Huang, et. al. (Case No. 19-cv-00766), naming the same named defendants, and seeking the same relief. On February 19, 2019, a third substantially similar derivative lawsuit was filed in the Northern District of California captioned The Booth Family Trust v. Huang, et. al. (Case No. 3:19-cv-00876), naming the same named defendants, and seeking substantially the same relief. On March 12, 2019, the three derivative actions were consolidated under case number 4:19-cv-00341-HSG, and titled In re NVIDIA Corporation Consolidated Derivative Litigation. The Court approved the parties' stipulation to stay the In Re NVIDIA Corporation Consolidated Derivative Litigation pending resolution of any motion to dismiss that NVIDIA may file in the In Re NVIDIA Corporation Securities Litigation.

On September 24, 2019, two shareholders, purporting to act on behalf of NVIDIA, filed two identical lawsuits in the District of Delaware. One is captioned Lipchitz v. Huang, et al. (Case No. 1:19-cv-01795-UNA) and the other is captioned Nelson v. Huang, et. al. (Case No. 1:19-cv-01798- UNA). The lawsuits assert claims 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. On December 11, 2019, the Court approved the parties' stipulation to stay the Lipchitz and Huang actions pending resolution of any motion to dismiss that NVIDIA may file in the In Re NVIDIA Corporation Securities Litigation.

It is possible that additional suits will be filed, or allegations received from shareholders, with respect to these same or other matters, naming NVIDIA and/or its officers and directors as defendants.

Accounting for Loss Contingencies

As of July 26, 2020, 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

Beginning August 2004, our Board of Directors authorized us to repurchase our stock.

Through July 26, 2020, we have repurchased an aggregate of 260 million shares under our share repurchase program for a total cost of $7.08 billion. All shares delivered from these repurchases have been placed into treasury stock. As of July 26, 2020, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $7.24 billion through December 2022.

During the second quarter and first half of fiscal year 2021, we paid $99 million and $197 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. In the prior fiscal year, we had reported two operating segments: GPU and Tegra Processor. During the first quarter of fiscal year 2021, we changed our operating segments to be consistent with the revised manner in which our CODM reviews our financial performance and allocates resources. The two new operating segments are "Graphics" and "Compute & Networking". Comparative periods presented reflect this change. Our operating segments are equivalent to our reportable segments.

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 GPUs for enterprise design; GRID software for cloud-based visual and virtual computing; and automotive platforms for infotainment systems. Our Compute & Networking segment includes Data Center platforms and systems for artificial intelligence, or AI, high performance computing, or HPC, and accelerated computing; Mellanox networking and interconnect solutions; DRIVE for autonomous vehicles; and Jetson for robotics and other embedded platforms.

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 Graphics or Compute & Networking for purposes of making operating decisions or assessing financial performance. The expenses include stock-based compensation expense, corporate infrastructure and support costs, acquisition-related costs, 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.

	Graphics	Compute & Networking	All Other	Consolidated
		(In millions)		
Three Months Ended July 26, 2020				
Revenue	$ 2,085	$ 1,781	$ —	$ 3,866
Operating income (loss)	$ 911	$ 691	$ (951)	$ 651
Three Months Ended July 28, 2019				
Revenue	$ 1,803	$ 776	$ —	$ 2,579
Operating income (loss)	$ 707	$ 164	$ (300)	$ 571
Six Months Ended July 26, 2020				
Revenue	$ 3,991	$ 2,955	$ —	$ 6,946
Operating income (loss)	$ 1,747	$ 1,142	$ (1,262)	$ 1,627
Six Months Ended July 28, 2019				
Revenue	$ 3,329	$ 1,470	$ —	$ 4,799
Operating income (loss)	$ 1,239	$ 259	$ (569)	$ 929

	Three Months Ended		Six Months Ended	
	July 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
		(In millions)		
Reconciling items included in "All Other" category:				
Acquisition-related and other costs	$ (474)	$ (5)	$ (479)	$ (15)
Stock-based compensation expense	(374)	(224)	(598)	(401)
Unallocated cost of revenue and operating expenses	(86)	(69)	(168)	(140)
Legal settlement costs	(17)	(2)	(17)	(13)
Total	$ (951)	$ (300)	$ (1,262)	$ (569)

Revenue by geographic region is allocated to individual countries based on the location to which the products are initially billed even if our customers' revenue is attributable to end customers that are located in a different 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 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
	(In millions)			
Revenue:				
Taiwan	$ 954	$ 635	$ 1,766	$ 1,333
United States	944	188	1,441	353
China (including Hong Kong)	855	583	1,614	1,136
Other Asia Pacific	698	756	1,305	1,178
Europe	240	288	494	537
Other countries	175	129	326	262
Total revenue	$ 3,866	$ 2,579	$ 6,946	$ 4,799

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

	Three Months Ended		Six Months Ended	
	July 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
	(In millions)			
Revenue:				
Gaming	$ 1,654	$ 1,313	$ 2,993	$ 2,368
Professional Visualization	203	291	510	557
Data Center	1,752	655	2,893	1,289
Automotive	111	209	266	375
OEM and Other	146	111	284	210
Total revenue	$ 3,866	$ 2,579	$ 6,946	$ 4,799

No customer represented 10% or more of total revenue for the second quarter and first half of fiscal year 2021. One customer represented 11% of our total revenue for the second quarter and first half of fiscal year 2020, and was attributable primarily to the Graphics segment.

One customer represented 14% and 21% of our accounts receivable balance as of July 26, 2020 and January 26, 2020, respectively.

Note 16 - Goodwill

During the first quarter of fiscal year 2021, we changed our operating segments to Graphics and Compute & Networking, as discussed in Note 15 of these Notes to Condensed Consolidated Financial Statements. As a result, our reporting units also changed, and we reassigned the goodwill balance to the new reporting units based on their relative fair values. We determined there was no goodwill impairment immediately prior to the reorganization. As of July 26, 2020, the total carrying amount of goodwill was $4.19 billion and the amount of goodwill allocated to our Graphics and Compute & Networking reporting units was $347 million and $3.85 billion, respectively. In the second quarter and first half of fiscal year 2021, goodwill increased by $3.56 billion and $3.57 billion, respectively. The increase in goodwill in the second quarter of fiscal year 2021 was due to goodwill of $3.43 billion arising from the Mellanox acquisition, and goodwill of $133 million from other acquisition activity, both of which were allocated to the Compute & Networking reporting unit.

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 within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created by those sections. Forward-looking statements 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. Other statements in this Form 10-Q regarding the potential future impact of the COVID-19 pandemic on the Company's business and results of operations are 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 greater detail under the heading "Risk Factors." Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this filing. You should read this 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 refere*nces to "NVIDIA," "we," "us," "our" or the "Company" mean NVIDIA Corporation and its subsidiaries.

NVIDIA, the NVIDIA logo, GeForce, DRIVE AGX Orin, GeForce NOW, GeForce RTX SUPER, NVIDIA A100, NVIDIA CUDA, NVIDIA DGX A100, NVIDIA DRIVE, NVIDIA GRID, NVIDIA Jarvis, NVIDIA Merlin, NVIDIA RTX, Mellanox, Quadro, Quadro RTX, Quadro View and Tegra 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 "Item 6. Selected Financial Data" of our Annual Report on Form 10-K for the fiscal year ended January 26, 2020 and "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, 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. Starting with a focus on PC graphics, we extended our focus in recent years to the revolutionary field of AI. Fueled by the sustained demand for exceptional 3D graphics and the scale of the gaming market, NVIDIA leveraged its GPU architecture to create platforms for virtual reality, HPC, and AI.

Through fiscal year 2020, our reportable segments were GPU and Tegra Processor. Starting with the first quarter of fiscal year 2021, our reportable segments have changed to "Graphics" and "Compute & Networking".

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 GPUs for enterprise design; GRID software for cloud-based visual and virtual computing; and automotive platforms for infotainment systems.

Our Compute & Networking segment includes Data Center platforms and systems for AI, HPC, and accelerated computing; Mellanox networking and interconnect solutions; DRIVE for autonomous vehicles; and Jetson for robotics and other embedded platforms.

All prior period comparisons presented reflect our new reportable segments. Our market platforms – Gaming, Professional Visualization, Data Center, Automotive, OEM and Other – remain unchanged.

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

COVID-19

The coronavirus identified in late calendar year 2019 (COVID-19) continues to be a worldwide pandemic. Government authorities around the world have implemented measures to try to contain the disease, such as travel bans and restrictions, quarantines, shelter-in-place orders and shutdowns. Since March 2020, most of our employees have been working remotely and we have temporarily prohibited most business travel.

Our employees and partners are performing above and beyond to keep our supply chain functioning normally. Many industries we serve are adversely impacted, including higher education research, energy, manufacturing, automotive, architecture, engineering, and media. Each industry is recovering, albeit at different rates. Professional Visualization revenue was negatively affected as corporate customers delayed spending on workstations. Automotive production is well below pre-COVID-19 levels.

The full extent and duration of COVID-19 is uncertain. As the COVID-19 pandemic continues, the timing and overall demand from customers and the availability of supply chain, logistical services and component supply may have a material net negative impact on our business and financial results. Refer to Part II, Item 1A of this Quarterly Report on Form 10-Q for additional information under the heading “Risk Factors”.

The Company believes its existing balances of cash, cash equivalents and marketable securities, along with commercial paper and other short-term liquidity arrangements, will be sufficient to satisfy its working capital needs, capital asset purchases, dividends, debt repayments and other liquidity requirements associated with its existing operations.

Second Quarter of Fiscal Year 2021 Summary

	Three Months Ended				
	July 26, 2020	April 26, 2020	July 28, 2019	Quarter-over-Quarter Change	Year-over-Year Change
	($ in millions, except per share data)				
Revenue	$ 3,866	$ 3,080	$ 2,579	26 %	50 %
Gross margin	58.8 %	65.1 %	59.8 %	(630) bps	(100) bps
Operating expenses	$ 1,624	$ 1,028	$ 970	58 %	67 %
Income from operations	$ 651	$ 976	$ 571	(33) %	14 %
Net income	$ 622	$ 917	$ 552	(32) %	13 %
Net income per diluted share	$ 0.99	$ 1.47	$ 0.90	(33) %	10 %

Revenue for the second quarter of fiscal year 2021 was $3.87 billion, up 50% from a year earlier and up 26% sequentially. Results for the second quarter include the acquisition of Mellanox on April 27, 2020, the first day of the quarter. Mellanox contributed approximately 14% of total company revenue.

Graphics segment revenue for the second quarter was $2.09 billion, up 16% from a year earlier and up 9% sequentially.

Compute & Networking segment revenue, which includes Mellanox, was $1.78 billion, up 130% from a year ago and up 52% sequentially.

From a market-platform perspective, Gaming revenue was $1.65 billion, up 26% from a year ago and up 24% sequentially. The year-on-year increase reflects higher sales of gaming GPUs. The sequential increase reflects higher sales from gaming GPUs and game console SOCs.

Professional Visualization revenue was $203 million, down 30% from a year earlier and down 34% sequentially.

Data Center revenue, which includes Mellanox, was $1.75 billion, up 167% from a year ago and up 54% sequentially. Mellanox contributed approximately 14% of total company revenue and just over 30% of Data Center revenue for the second quarter. In addition to Mellanox, the year-on-year and sequential increases were driven by the ramp of Ampere GPU architecture products.

Automotive revenue was $111 million, down 47% from a year earlier and down 28% sequentially.

OEM and Other revenue was $146 million, up 32% from a year ago and up 6% sequentially, primarily due to higher demand for entry-level laptop GPUs.

Gross margin for the second quarter of fiscal year 2021 was 58.8%, down 100 basis points from a year earlier and down 630 basis points sequentially, reflecting charges related to the Mellanox acquisition. These include a non-recurring inventory step-up expense of $161 million and intangible asset amortization of $84 million that is expected to be recurring.

Operating expenses for the second quarter of fiscal year 2021 were $1.62 billion, up 67% from a year earlier and up 58% sequentially, primarily driven by our Mellanox acquisition, as well as hiring additional employees.

Income from operations for the second quarter of fiscal year 2021 was $651 million, up 14% from a year earlier and down 33% sequentially. Net income for the second quarter of fiscal year 2021 was $622 million. Net income per diluted share for the second quarter of fiscal year 2021 was $0.99, up 10% from a year earlier and down 33% sequentially.

Cash, cash equivalents and marketable securities at the end of the second quarter were $10.98 billion, up from $8.47 billion a year earlier and down from $16.35 billion in the prior quarter. The year-on-year increase primarily reflects the issuance of the $5 billion of notes in March 2020, offset by acquisitions. The sequential decrease reflects the Mellanox acquisition during the second quarter.

We paid $99 million in quarterly cash dividends in the second quarter.

Market Platform Highlights

During the second quarter of fiscal year 2021, in our Gaming platform, we ramped 100+ new GeForce laptops across a range of price points; announced a range of games now supporting NVIDIA RTX ray tracing and DLSS AI super resolution; expanded GeForce NOW to Chromebooks; and announced that Square Enix is adding its catalog to GeForce NOW.

In our Professional Visualization platform, we launched with Acer, Dell, Lenovo and Microsoft new mobile workstations for professional creators, based on NVIDIA Quadro graphics; powered new AI features in the latest releases of Substance Alchemist and Blender; announced that NVIDIA RTX has been implemented in the latest application releases from Foundry, Chaos Group and Redshift by Maxon; and released NVIDIA Quadro View.

In our Data Center platform, we announced more than 50 NVIDIA A100-powered systems; powered eight of the 10, and two-thirds of the total systems, on the latest TOP500 list of the world's fastest supercomputers; set 16 AI performance records on the latest MLPerf benchmarks; made the NVIDIA A100 Tensor Core GPU available on Google Cloud; provided CUDA GPU-acceleration for Apache Spark; and unveiled the NVIDIA Mellanox UFM Cyber-AI Platform.

In our Automotive platform, we announced with Mercedes-Benz that the carmaker is integrating into every vehicle in its lineup, beginning in 2024, a new software-defined vehicle architecture built on the NVIDIA DRIVE AV autonomous driving software and AGX Orin AV computer.

During the first quarter of fiscal year 2021, in our Gaming platform, we launched Minecraft with RTX as an open beta on Windows 10; announced the release of laptop models powered by NVIDIA GeForce GPUs; expanded the RTX Studio lineup powered by new GeForce RTX SUPER GPUs; released DLSS 2.0; and expanded NVIDIA GeForce NOW.

In our Professional Visualization platform, we powered Autodesk's latest 3D visualization software with NVIDIA Quadro RTX; accelerated Altair's engineering software with NVIDIA CUDA; and brought Quadro professional graphics to HP's mobile workstation lineup.

In our Data Center platform, we introduced NVIDIA A100 data center GPU, the first based on the NVIDIA Ampere architecture; launched the NVIDIA DGX A100; introduced two products for the EGX Edge AI platform; released NVIDIA Jarvis; collaborated with the open-source community to bring end-to-end GPU acceleration to Apache Spark 3.0; and announced NVIDIA Merlin.

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

Management's discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, cost of revenue, expenses and related disclosure of contingencies. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Our management has discussed the development and selection of these critical accounting policies and estimates with the Audit Committee of our Board of Directors. The Audit Committee has reviewed our disclosures relating to our critical accounting policies and estimates in this Quarterly Report on Form 10-Q. Due to the Mellanox acquisition, we added the following critical accounting policy:

Business Combinations

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

Goodwill and intangible assets often represent a significant portion of the assets acquired in a business combination. We recognize the fair value of an acquired intangible apart from goodwill whenever the intangible arises from contractual or other legal rights, or when it can be separated or divided from the acquired entity and sold, transferred, licensed, rented or exchanged, either individually or in combination with a related contract, asset or liability. Intangible assets consist primarily of technology, customer relationships, order backlog and trade name acquired in a business combination and IPR&D. We generally assess the estimated fair values of acquired intangibles using a combination of valuation techniques. To estimate fair value, we are required to make certain estimates and assumptions, including future economic and market conditions, revenue growth, technology migration curve, and risk-adjusted discount rates. Our estimates require significant judgment and are based on historical data, various internal estimates, and external sources. Our assessment of IPR&D also includes consideration of the risk of the projects not achieving technological feasibility.

There have been no other material changes in our critical accounting policies and estimates since our Annual Report on Form 10-K for the fiscal year ended January 26, 2020. Refer to Note 1 “Basis of Presentation” to the condensed consolidated financial statements for additional details. In addition, please refer to Management’s Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended January 26, 2020 for a more complete discussion of 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 26, 2020	July 28, 2019	July 26, 2020	July 28, 2019
Revenue	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue	41.2	40.2	38.4	40.9
Gross profit	58.8	59.8	61.6	59.1
Operating expenses				
Research and development	25.8	27.3	24.9	28.7
Sales, general and administrative	16.2	10.3	13.3	11.0
Total operating expenses	42.0	37.6	38.2	39.7
Income from operations	16.8	22.2	23.4	19.4
Interest income	0.3	1.8	0.6	1.9
Interest expense	(1.4)	(0.5)	(1.1)	(0.6)
Other income (expense), net	(1.1)	1.3	(0.5)	1.3
Income before income tax	15.7	23.5	22.9	20.7
Income tax expense (benefit)	(0.3)	2.1	0.7	1.0
Net income	16.0 %	21.4 %	22.2 %	19.7 %

Revenue

Revenue by Reportable Segments

	Three Months Ended				Six Months Ended			
	July 26, 2020	July 28, 2019	$ Change	% Change	July 26, 2020	July 28, 2019	$ Change	% Change
				($ in millions)				
Graphics	$ 2,085	$ 1,803	$ 282	16 %	$ 3,991	$ 3,329	$ 662	20 %
Compute & Networking	1,781	776	1,005	130 %	2,955	1,470	1,485	101 %
Total	$ 3,866	$ 2,579	$ 1,287	50 %	$ 6,946	$ 4,799	$ 2,147	45 %

Graphics - Graphics segment revenue increased 16% in the second quarter of fiscal year 2021 compared to the second quarter of fiscal year 2020, which reflects growth in GeForce GPUs for gaming, partially offset by lower sales of Quadro workstations and game console SOCs.

Graphics segment revenue increased 20% in the first half of fiscal year 2021 compared to the first half of fiscal year 2020, which reflects growth in GeForce GPUs for gaming, game console SOCs, and Quadro workstations.

Compute & Networking - Compute & Networking segment revenue for the second quarter of fiscal year 2021 compared to the second quarter of fiscal year 2020 increased by 130% and revenue for the first half of fiscal year 2021 compared to the first half of fiscal year 2020 increased by 101%. These increases reflect the addition of Mellanox acquired on April 27, 2020 and the ramp of Ampere GPU architecture products, partially offset by lower autonomous driving development agreement revenue.

Concentration of Revenue

Revenue from sales to customers outside of the United States accounted for 76% and 79% of total revenue for the second quarter and first half of fiscal year 2021, respectively, and 93% of total revenue for the second quarter and first half of fiscal year 2020. Revenue by geographic region is allocated to individual countries based on the location to which the products are initially billed even if the revenue is attributable to end customers in a different location.

No customer represented 10% or more of total revenue for the second quarter and first half of fiscal year 2021. One customer represented 11% of our total revenue for the second quarter and the first half of fiscal year 2020 and was attributable primarily to the Graphics segment.

Gross Margin

Our overall gross margin decreased to 58.8% for the second quarter of fiscal year 2021 from 59.8% for the second quarter of fiscal year 2020, reflecting Mellanox acquisition-related costs including a non-recurring inventory step-up charge of $161 million and ongoing intangible asset amortization of $84 million, partially offset by an increase due to a shift in product mix. Our overall gross margin increased to 61.6% for the first half of fiscal year 2021 from 59.1% for the first half of fiscal year 2020, primarily driven by a shift in product mix, partially offset by Mellanox acquisition-related costs including a non-recurring inventory step-up charge of $161 million and ongoing intangible asset amortization of $85 million.

Inventory provisions totaled $45 million and $28 million for the second quarter of fiscal years 2021 and 2020, respectively. Sales of inventory that was previously written-off or -down totaled $49 million and $19 million for the second quarter of fiscal years 2021 and 2020, respectively. As a result, the overall net effect on our gross margin was insignificant in the second quarter of fiscal year 2021, and an unfavorable impact of 0.4% in the second quarter of fiscal year 2020.

Inventory provisions totaled $81 million and $72 million for the first half of fiscal years 2021 and 2020, respectively. Sales of inventory that was previously written-off or -down totaled $88 million and $31 million for the first half of fiscal years 2021 and 2020, respectively. As a result, the overall net effect on our gross margin was insignificant in the first half of fiscal year 2021 and an unfavorable impact of 0.9% for the first half of fiscal year 2020.

A discussion of our gross margin results for each of our reportable segments is as follows:

Graphics - The gross margin of our Graphics segment increased during the second quarter and first half of fiscal year 2021 compared to the second quarter and first half of fiscal year 2020, primarily driven by a shift in product mix.

Compute & Networking - The gross margin of our Compute & Networking segment decreased during the second quarter and first half of fiscal year 2021 compared to the second quarter and first half of fiscal year 2020, primarily driven by Mellanox acquisition-related costs, partially offset by higher data center sales.

Operating Expenses

	Three Months Ended				Six Months Ended			
	July 26, 2020	July 28, 2019	$ Change	% Change	July 26, 2020	July 28, 2019	$ Change	% Change
	($ in millions)				($ in millions)			
Research and development expenses	$ 997	$ 704	$ 293	42 %	$ 1,732	$ 1,379	$ 353	26 %
% of net revenue	*26 %*	*27 %*			*25 %*	*29 %*		
Sales, general and administrative expenses	627	266	361	136 %	920	529	391	74 %
% of net revenue	*16 %*	*10 %*			*13 %*	*11 %*		
Total operating expenses	$ 1,624	$ 970	$ 654	67 %	$ 2,652	$ 1,908	$ 744	39 %

Research and Development

Research and development expenses increased by 42% and 26% during the second quarter and first half of fiscal year 2021, compared to the second quarter and first half of fiscal year 2020, respectively, primarily driven by expenses and stock-based compensation related to the Mellanox acquisition. In addition to Mellanox, increases reflect employee compensation and related costs, including stock-based compensation and infrastructure costs.

Sales, General and Administrative

Sales, general and administrative expenses increased by 136% and 74% during the second quarter and first half of fiscal year 2021, compared to the second quarter of fiscal year 2020, respectively, primarily driven by Mellanox acquisition-related expenses. In addition to Mellanox, increases reflect employee compensation and related costs, including stock-based compensation and infrastructure costs.

Other Income (Expense), Net

Interest Income and Interest Expense

Interest income consists of interest earned on cash, cash equivalents and marketable securities. Interest income was $13 million and $47 million during the second quarter of fiscal years 2021 and 2020, respectively, and $44 million and $92 million during the first half of fiscal years 2021 and 2020, respectively. The decrease in interest income was primarily due to lower interest earned on our investments.

Interest expense is primarily comprised of coupon interest and debt discount amortization related to our September 2016 Notes and March 2020 Notes. Interest expense was $54 million and $13 million during the second quarter of fiscal years 2021 and 2020, respectively, and $78 million and $27 million during the first half of fiscal years 2021 and 2020, respectively.

Income Taxes

We recognized an income tax benefit of $13 million and an income tax expense of $52 million for the second quarter and first half of fiscal year 2021, respectively, and an income tax expense of $54 million and $48 million for the second quarter and first half of fiscal year 2020, respectively. The income tax benefit as a percentage of income before income tax was 2.0% for the second quarter of fiscal year 2021. The income tax expense as a percentage of income before income tax was 3.3% for the first half of fiscal year 2021, and 8.8% and 4.9% for the second quarter and first half of fiscal year 2020, respectively.

The decrease in our effective tax rate for the second quarter and first half of fiscal year 2021 as compared to the same periods of fiscal year 2020 was primarily due to a decrease in the proportional amount of earnings subject to U.S. tax and an increase of tax benefits from stock-based compensation and the U.S. federal research tax credit.

Refer to Note 6 of the Notes to Condensed Consolidated Financial Statements for further information.

Liquidity and Capital Resources

	July 26, 2020	January 26, 2020
	(In millions)	
Cash and cash equivalents	$ 3,274	$ 10,896
Marketable securities	7,707	1
Cash, cash equivalents and marketable securities	$ 10,981	$ 10,897

	Six Months Ended	
	July 26, 2020	July 28, 2019
	(In millions)	
Net cash provided by operating activities	$ 2,476	$ 1,656
Net cash provided by (used in) investing activities	$ (14,545)	$ 5,040
Net cash provided by (used in) financing activities	$ 4,447	$ (373)

As of July 26, 2020, we had $10.98 billion in cash, cash equivalents and marketable securities, a decrease of $84 million from the end of fiscal year 2020. 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 2021 compared to the first half of fiscal year 2020, due to higher net income, partially offset by changes in working capital. Change in working capital was driven by an increase in inventory offset by inventory step-up expense from the Mellanox acquisition and changes in operating liabilities.

Cash used in investing activities increased in the first half of fiscal year 2021 compared to cash provided in the first half of fiscal year 2020, primarily reflects cash used for the acquisition of Mellanox, higher purchases of marketable securities, and lower maturities and sales of marketable securities.

Cash provided by financing activities increased in the first half of fiscal year 2021 compared to cash used in the first half of fiscal year 2020, primarily reflects the debt issued in the first quarter of fiscal year 2021.

Liquidity

Our primary sources of liquidity are our cash and cash equivalents, our marketable securities, and the cash generated by our operations. As of July 26, 2020, we had $10.98 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 certificates of deposits. These marketable securities are 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 and capital expenditures for at least the next twelve months.

We have approximately $857 million of cash, cash equivalents, and marketable securities that we have not accrued any related foreign or state taxes if we repatriate these amounts to the United States. Other than that, as a result of the Tax Cuts and Jobs Act, or TCJA, substantially all of our cash, cash equivalents and marketable securities held outside of the United States as of July 26, 2020 are available for use in the United States without incurring additional U.S. federal income taxes.

Capital Return to Shareholders

In the first half of fiscal year 2021, we paid $197 million in quarterly cash dividends. Our cash dividend program and the payment of future cash dividends under that program are subject to our Board's continuing determination that the dividend program and the declaration of dividends thereunder are in the best interests of our shareholders.

As of July 26, 2020, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $7.24 billion through December 2022. We did not repurchase any shares during the first half of fiscal year 2021.

Outstanding Indebtedness and Credit Facilities

In March 2020, we issued $1.50 billion of the 2.85% Notes Due 2030, $1.00 billion of the 3.50% Notes Due 2040, $2.00 billion of the 3.50% Notes Due 2050, and $500 million of the 3.70% Notes Due 2060, or collectively, the March 2020 Notes. The net proceeds from the March 2020 Notes were $4.97 billion, after deducting debt discounts and estimated issuance costs.

In September 2016, we issued $1.00 billion of the 2.20% Notes Due 2021 and $1.00 billion of the 3.20% Notes Due 2026, or collectively, the September 2016 Notes. The net proceeds from the September 2016 Notes were $1.98 billion, after deducting debt discounts and issuance costs.

We have a Credit Agreement under which we may borrow up to $575 million for general corporate purposes and can obtain revolving loan commitments up to $425 million. As of July 26, 2020, we had not borrowed any amounts under this agreement.

We have a $575 million commercial paper program to support general corporate purposes. As of July 26, 2020, we had not issued any commercial paper.

Off-Balance Sheet Arrangements

As of July 26, 2020, we had no material off-balance sheet arrangements as defined by applicable SEC regulations.

Contractual Obligations

There are $153 million of long-term tax liabilities related to tax basis differences in Mellanox and unrecognized tax benefits of $286 million, which includes related interest and penalties of $41 million recorded in non-current income tax payable as of July 26, 2020. 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 26, 2020. 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 26, 2020 for a description of our contractual obligations. For a description of our long-term debt, purchase obligations, and operating lease obligations, refer to Note 12, Note 13, and Note 3 of the Notes to Condensed Consolidated Financial Statements, respectively.

Adoption of New and Recently Issued Accounting Pronouncements

Refer to Note 1 of the Notes to Condensed Consolidated Financial Statements for a discussion of adoption of 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 our Annual Report on Form 10-K for the fiscal year ended January 26, 2020. As of July 26, 2020, there have been no material changes, including the impact of the COVID-19 pandemic, to the financial market risks described as of January 26, 2020.

Foreign Exchange Rate Risk

The impact of foreign currency transactions related to foreign exchange rate risk is described in our Annual Report on Form 10-K for the fiscal year ended January 26, 2020. As of July 26, 2020, there have been no material changes, including the impact of the COVID-19 pandemic, to the foreign exchange rate risks described as of January 26, 2020.

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 July 26, 2020, our management, including our Chief Executive Officer and Chief Financial Officer, has concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended) were effective to provide reasonable assurance.

Changes in Internal Control Over Financial Reporting

Other than the acquisition of Mellanox, there were no changes in our internal control over financial reporting during the second quarter of fiscal year 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting despite the fact that virtually all of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the COVID-19 situation on our internal controls to minimize the impact on their operating effectiveness. We are in the process of integrating Mellanox into our systems and control environment. We believe that we have taken the necessary steps to monitor and maintain appropriate internal control over financial reporting during this integration.

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 26, 2020. Also refer to Item 3, “Legal Proceedings” in our Annual Report on Form 10-K for the fiscal year ended January 26, 2020 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 26, 2020 and Item 1A of our Quarterly Report on Form 10-Q for the fiscal quarter ended April 26, 2020.

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 26, 2020 and Item 1A of our Quarterly Report on Form 10-Q for the fiscal quarter ended April 26, 2020. 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.

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

COVID-19 has spread worldwide, resulting in shutdowns of manufacturing and commerce. COVID-19 has resulted in government authorities implementing numerous measures to try to contain the disease, such as travel bans and restrictions, quarantines, shelter-in-place orders and shutdowns. These measures have impacted, and may further impact, our workforce and operations, the operations of our customers and our partners, and those of our respective vendors and suppliers (including our subcontractors and third-party contract manufacturers). Our critical business operations, including our headquarters, most of our finished goods inventory and many of our key suppliers, are located in regions which have been impacted by COVID-19. Our customers and suppliers worldwide have also been affected and may continue to be affected by COVID-19 related restrictions and closures. For example, in the second quarter of fiscal year 2021 many industries we serve were adversely impacted by COVID-19, including higher education, research, energy, manufacturing, automotive, architecture, engineering and media. These industries may continue to be adversely impacted by COVID-19 and may recover at different rates. Our Professional Visualization revenue was negatively affected in the second quarter as corporate customers delayed spending on workstations. Automotive production was and remains well below pre-COVID-19 levels. In some regions, the shelter-in-place orders have driven a temporary increase in demand for our products that may not be sustainable.

The manufacture of product components, the final assembly of our products and other critical operations are concentrated in certain geographic locations, including Taiwan, China, Hong Kong and Korea. Additionally, a significant portion of our finished goods product distribution occurs through Hong Kong. Each of these countries has been affected by the pandemic and has taken measures to try to contain it. There is considerable uncertainty regarding the impact of such measures and potential future measures, including restrictions on manufacturing facilities, on our support operations or workforce, or on our customers, partners, vendors and suppliers. Such measures, as well as restrictions or disruptions of transportation, such as reduced availability or increased cost of air transport, port closures and increased border controls or closures, could limit our capacity to meet customer demand and have a material adverse effect on our financial condition and results of operations.

The spread of COVID-19 has caused us to modify our business practices (including employee travel, mandatory work-from-home policies and cancellation of physical participation in meetings, events and conferences), and we may take further actions as required by government authorities or that we determine are in the best interests of our employees, customers, partners and suppliers. Most of our employees in the second quarter continued to work remotely. There is no certainty that such measures will be sufficient to mitigate the risks posed by the disease, and our ability to perform critical functions could be harmed.

In addition, while the extent and duration of the COVID-19 pandemic on the global economy and our business in particular is difficult to assess or predict, the pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, which may reduce our ability to access capital or our customers' ability to pay us for past or future purchases, which could negatively affect our liquidity. Factors related to the COVID-19 pandemic have reduced demand for some of our products and may continue to do so. In addition, a recession or financial market correction resulting from the lack of containment and spread of COVID-19 has and could continue to impact overall technology spending, adversely affecting demand for our products, our business and the value of our common stock.

The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. The extent of the impact of the COVID-19 pandemic on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected time frame, will depend on future developments, including, but not limited to, the duration and continued spread of the pandemic, its severity, the actions to contain the disease or treat its impact, further related restrictions on travel, and the duration, timing and severity of the impact on customer spending, including any recession resulting from the pandemic, all of which are uncertain and cannot be predicted. An extended period of global supply chain and economic disruption as a result of the COVID-19 pandemic could have a material negative impact on our business, results of operations, access to sources of liquidity and financial condition, though the full extent and duration is uncertain.

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

As a multinational corporation, we are subject to income taxes as well as non-income based taxes, such as payroll, sales, use, value-added, net worth, property and goods and services taxes, in both the United States and various foreign jurisdictions. Our domestic and international tax liabilities are subject to the allocation of revenue and expenses in different jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes and other tax liabilities. We are regularly under audit by tax authorities in different jurisdictions. For example, we are currently under examination by the Internal Revenue Service for our fiscal years 2018 and 2019. Although we believe our tax estimates are reasonable, tax authorities may disagree with certain positions we have taken, and any adverse outcome of such a review or audit could increase our worldwide effective tax rate, increase the amount of non-income taxes imposed on our business, and harm our financial position, results of operations, and cash flows. Further, changes in United States federal, and state or international tax laws applicable to multinational corporations or other fundamental law changes may materially impact our tax expense and cash flows, as we experienced in fiscal year 2018 with the passage of the TCJA.

Our future effective tax rate may be affected by such factors as changes in tax laws, changes in our business or statutory rates, changes in jurisdictions in which our profits are determined to be earned and taxed, changes in available tax credits, the resolution of issues arising from tax audits, changes in United States generally accepted accounting principles, adjustments to income taxes upon finalization of tax returns, increases in expenses not deductible for tax purposes, changes in the valuation of our deferred tax assets and liabilities and in deferred tax valuation allowances, changing interpretation of existing laws or regulations, the impact of accounting for stock-based compensation and the recognition of excess tax benefits and tax deficiencies within the income tax provision in the period in which they occur, the impact of accounting for business combinations, shifts in the amount of earnings in the United States compared with other regions in the world and overall levels of income before tax, changes in our international organization, as well as the expiration of statute of limitations and settlements of audits. Any changes in our effective tax rate may reduce our net income.

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

Issuer Purchases of Equity Securities

Beginning August 2004, our Board of Directors authorized us to repurchase our stock.

Since the inception of our share repurchase program, we have repurchased an aggregate of 260 million shares for a total cost of $7.08 billion through July 26, 2020. All shares delivered from these repurchases have been placed into treasury stock.

The repurchases can be made in the open market, in privately negotiated transactions, or in structured share repurchase programs, and can be made in one or more larger repurchases. 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 half of fiscal year 2021, we paid $197 million in quarterly cash dividends. As of July 26, 2020, we were authorized, subject to certain specifications, to repurchase additional shares of our common stock up to $7.24 billion through December 2022. We did not repurchase any shares during the first half of fiscal year 2021.

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 of fiscal year 2021, we withheld approximately 1 million shares at a total cost of $196 million through net share settlements. During the first half of fiscal year 2021, we withheld approximately 2 million shares at a total cost of $418 million through net share settlements. Refer to Note 4 of the Notes to Condensed Consolidated Financial Statements for further discussion regarding our equity incentive plans.

ITEM 6. EXHIBITS

Exhibit No.	Exhibit Description	Schedule /Form	File Number	Exhibit	Filing Date
10.1+	Amended and Restated 2007 Equity Incentive Plan	8-K	000-23985	10.1	6/15/2020
10.2+	Amended and Restated 2012 Employee Stock Purchase Plan	8-K	000-23985	10.2	6/15/2020
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

+ Management contract or compensatory plan or arrangement

In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release Nos. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this 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 19, 2020

NVIDIA Corporation

By: /s/ Colette M. Kress

Colette M. Kress

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