

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

FORM 10-Q

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

For the quarterly period ended October 31, 2023

or

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

For the transition period from _____ to _____

Commission File Number 001-35594

PALO ALTO NETWORKS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-2530195
(I.R.S. Employer
Identification No.)

3000 Tannery Way
Santa Clara, California 95054
(Address of principal executive offices, including zip code)

(408) 753-4000
(Registrant's telephone number, including area code)
NA

(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, \$0.0001 par value per share	PANW	The Nasdaq Stock Market LLC (Nasdaq Global Select Market)

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

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

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

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

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

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

The number of shares outstanding of the registrant's common stock as of November 10, 2023 was 315.3 million.

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Part I

Item 1. Financial Statements

PALO ALTO NETWORKS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions, except per share data)

	October 31, 2023	July 31, 2023
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,491.4	\$ 1,135.3
Short-term investments	1,402.4	1,254.7
Accounts receivable, net of allowance for credit losses of \$8.2 and \$7.8 as of October 31, 2023 and July 31, 2023, respectively	1,413.0	2,463.2
Short-term financing receivables, net	445.9	388.8
Short-term deferred contract costs	328.7	339.2
Prepaid expenses and other current assets	396.2	466.8
Total current assets	6,477.6	6,048.0
Property and equipment, net	352.6	354.5
Operating lease right-of-use assets	274.3	263.3
Long-term investments	2,988.9	3,047.9
Long-term financing receivables, net	639.8	653.3
Long-term deferred contract costs	515.4	547.1
Goodwill	2,926.8	2,926.8
Intangible assets, net	290.5	315.4
Other assets	342.6	344.8
Total assets	\$ 14,808.5	\$ 14,501.1
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 131.8	\$ 132.3
Accrued compensation	331.4	548.3
Accrued and other liabilities	371.5	390.8
Deferred revenue	4,732.0	4,674.6
Convertible senior notes, net	1,946.7	1,991.5
Total current liabilities	7,513.4	7,737.5
Long-term deferred revenue	4,710.8	4,621.8
Long-term operating lease liabilities	275.8	279.2
Other long-term liabilities	138.0	114.2
Total liabilities	12,638.0	12,752.7
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock; \$0.0001 par value; 100.0 shares authorized; none issued and outstanding as of October 31, 2023 and July 31, 2023	—	—
Common stock and additional paid-in capital; \$0.0001 par value; 1,000.0 shares authorized; 313.7 and 308.3 shares issued and outstanding as of October 31, 2023 and July 31, 2023, respectively	3,296.7	3,019.0
Accumulated other comprehensive loss	(93.0)	(43.2)
Accumulated deficit	(1,033.2)	(1,227.4)
Total stockholders' equity	2,170.5	1,748.4
Total liabilities and stockholders' equity	\$ 14,808.5	\$ 14,501.1

See notes to condensed consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in millions, except per share data)

	Three Months Ended October 31,	
	2023	2022
Revenue:		
Product	\$ 341.1	\$ 330.0
Subscription and support	1,537.0	1,233.4
Total revenue	1,878.1	1,563.4
Cost of revenue:		
Product	77.4	120.1
Subscription and support	395.4	341.8
Total cost of revenue	472.8	461.9
Total gross profit	1,405.3	1,101.5
Operating expenses:		
Research and development	409.5	371.8
Sales and marketing	660.5	615.0
General and administrative	120.1	99.5
Total operating expenses	1,190.1	1,086.3
Operating income	215.2	15.2
Interest expense	(2.9)	(6.8)
Other income, net	70.3	26.0
Income before income taxes	282.6	34.4
Provision for income taxes	88.4	14.4
Net income	\$ 194.2	\$ 20.0
Net income per share, basic	\$ 0.63	\$ 0.07
Net income per share, diluted	\$ 0.56	\$ 0.06
Weighted-average shares used to compute net income per share, basic	310.1	299.8
Weighted-average shares used to compute net income per share, diluted	349.8	338.4

See notes to condensed consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited, in millions)

	Three Months Ended October 31,	
	2023	2022
Net income	\$ 194.2	\$ 20.0
Other comprehensive income (loss), net of tax:		
Change in unrealized gains (losses) on investments	(18.2)	(27.8)
Cash flow hedges:		
Change in unrealized gains (losses)	(40.9)	(42.5)
Net realized (gains) losses reclassified into earnings	9.3	14.8
Net change on cash flow hedges	(31.6)	(27.7)
Other comprehensive loss	(49.8)	(55.5)
Comprehensive income (loss)	\$ 144.4	\$ (35.5)

See notes to condensed consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
 (Unaudited, in millions)

Three Months Ended October 31, 2023

	Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of July 31, 2023	308.3	\$ 3,019.0	\$ (43.2)	\$ (1,227.4)	\$ 1,748.4
Net income	—	—	—	194.2	194.2
Other comprehensive loss	—	—	(49.8)	—	(49.8)
Issuance of common stock in connection with employee equity incentive plans	2.6	87.0	—	—	87.0
Taxes paid related to net share settlement of equity awards	—	(15.5)	—	—	(15.5)
Share-based compensation for equity-based awards	—	273.1	—	—	273.1
Repurchase and retirement of common stock	(0.3)	(66.7)	—	—	(66.7)
Settlement of convertible notes	0.3	(0.2)	—	—	(0.2)
Settlement of note hedges	(0.3)	—	—	—	—
Settlement of warrants	3.1	—	—	—	—
Balance as of October 31, 2023	313.7	\$ 3,296.7	\$ (93.0)	\$ (1,033.2)	\$ 2,170.5

Three Months Ended October 31, 2022

	Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of July 31, 2022	298.8	\$ 1,932.7	\$ (55.6)	\$ (1,667.1)	\$ 210.0
Net income	—	—	—	20.0	20.0
Other comprehensive loss	—	—	(55.5)	—	(55.5)
Issuance of common stock in connection with employee equity incentive plans	3.5	68.2	—	—	68.2
Taxes paid related to net share settlement of equity awards	—	(13.9)	—	—	(13.9)
Share-based compensation for equity-based awards	—	279.2	—	—	279.2
Balance as of October 31, 2022	302.3	\$ 2,266.2	\$ (111.1)	\$ (1,647.1)	\$ 508.0

See notes to condensed consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in millions)

	Three Months Ended October 31,	
	2023	2022
Cash flows from operating activities		
Net income	\$ 194.2	\$ 20.0
Adjustments to reconcile net income to net cash provided by operating activities:		
Share-based compensation for equity-based awards	271.0	266.0
Depreciation and amortization	64.3	70.7
Amortization of deferred contract costs	105.5	97.0
Amortization of debt issuance costs	1.0	1.8
Reduction of operating lease right-of-use assets	12.4	12.1
Amortization of investment premiums, net of accretion of purchase discounts	(14.7)	1.7
Changes in operating assets and liabilities:		
Accounts receivable, net	1,050.2	904.4
Financing receivables, net	(43.6)	(12.4)
Deferred contract costs	(63.3)	(60.1)
Prepaid expenses and other assets	54.0	(28.7)
Accounts payable	(0.4)	(1.0)
Accrued compensation	(216.9)	(192.3)
Accrued and other liabilities	(34.1)	(28.1)
Deferred revenue	146.4	185.6
Net cash provided by operating activities	1,526.0	1,236.7
Cash flows from investing activities		
Purchases of investments	(854.7)	(2,112.8)
Proceeds from sales of investments	304.6	485.0
Proceeds from maturities of investments	457.9	347.6
Purchases of property, equipment, and other assets	(36.8)	(39.6)
Net cash used in investing activities	(129.0)	(1,319.8)
Cash flows from financing activities		
Repayments of convertible senior notes	(46.0)	—
Repurchases of common stock	(66.7)	(22.7)
Proceeds from sales of shares through employee equity incentive plans	86.4	67.7
Payments for taxes related to net share settlement of equity awards	(15.5)	(13.9)
Net cash provided by (used in) financing activities	(41.8)	31.1
Net increase (decrease) in cash, cash equivalents, and restricted cash	1,355.2	(52.0)
Cash, cash equivalents, and restricted cash - beginning of period	1,142.2	2,124.8
Cash, cash equivalents, and restricted cash - end of period	\$ 2,497.4	\$ 2,072.8
Reconciliation of cash, cash equivalents, and restricted cash to the condensed consolidated balance sheets		
Cash and cash equivalents	\$ 2,491.4	\$ 2,067.2
Restricted cash included in prepaid expenses and other current assets	6.0	5.6
Total cash, cash equivalents, and restricted cash	\$ 2,497.4	\$ 2,072.8

See notes to condensed consolidated financial statements.

Notes to Condensed Consolidated Financial Statements (Unaudited)

1. Description of Business and Summary of Significant Accounting Policies

Description of Business

Palo Alto Networks, Inc. (the “Company,” “we,” “us,” or “our”), headquartered in Santa Clara, California, was incorporated in March 2005 under the laws of the State of Delaware and commenced operations in April 2005. We empower enterprises, organizations, service providers, and government entities to secure their users, networks, clouds, and endpoints by delivering comprehensive cybersecurity enabled by artificial intelligence and automation.

Basis of Presentation and Principles of Consolidation

The accompanying condensed consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”), consistent in all material respects with those applied in our Annual Report on Form 10-K for the fiscal year ended July 31, 2023, filed with the Securities and Exchange Commission (“SEC”) on September 1, 2023. The condensed consolidated financial statements include our accounts and our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

The condensed consolidated financial statements are unaudited but include all adjustments of a normal recurring nature necessary for a fair presentation of our quarterly results. Our condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes in our Annual Report on Form 10-K for the fiscal year ended July 31, 2023.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported and disclosed in the condensed consolidated financial statements and the accompanying notes. We base our estimates on assumptions, both historical and forward looking, that we believe are reasonable. Actual results could differ materially from those estimates due to risks and uncertainties, including uncertainty in the current economic environment.

Summary of Significant Accounting Policies

There have been no material changes to our significant accounting policies as of and for the three months ended October 31, 2023, as compared to the significant accounting policies described in our Annual Report on Form 10-K for the fiscal year ended July 31, 2023.

2. Revenue

Disaggregation of Revenue

The following table presents revenue by geographic theater (in millions):

	Three Months Ended October 31,	
	2023	2022
Revenue:		
Americas		
United States	\$ 1,204.3	\$ 1,006.3
Other Americas	82.3	64.4
Total Americas	1,286.6	1,070.7
Europe, the Middle East, and Africa (“EMEA”)	364.9	307.9
Asia Pacific and Japan (“APAC”)	226.6	184.8
Total revenue	\$ 1,878.1	\$ 1,563.4

The following table presents revenue for groups of similar products and services (in millions):

	Three Months Ended October 31,	
	2023	2022
Revenue:		
Product	\$ 341.1	\$ 330.0
Subscription and support		
Subscription	988.3	764.0
Support	548.7	469.4
Total subscription and support	1,537.0	1,233.4
Total revenue	\$ 1,878.1	\$ 1,563.4

Deferred Revenue

During the three months ended October 31, 2023 and 2022, we recognized approximately \$1.4 billion and \$1.1 billion of revenue pertaining to amounts that were deferred as of July 31, 2023 and 2022, respectively.

Remaining Performance Obligations

Remaining performance obligations were \$10.4 billion as of October 31, 2023, of which we expect to recognize as revenue approximately \$5.0 billion over the next 12 months and the remainder thereafter.

3. Fair Value Measurements

The following table presents our financial assets and liabilities measured at fair value on a recurring basis as of October 31, 2023 and July 31, 2023 (in millions):

	October 31, 2023				July 31, 2023			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash equivalents:								
Money market funds	\$ 1,595.3	\$ —	\$ —	\$ 1,595.3	\$ 476.1	\$ —	\$ —	\$ 476.1
Commercial paper	—	297.0	—	297.0	—	151.4	—	151.4
Corporate debt securities	—	8.6	—	8.6	—	—	—	—
U.S. government and agency securities	—	24.9	—	24.9	—	—	—	—
Total cash equivalents	1,595.3	330.5	—	1,925.8	476.1	151.4	—	627.5
Short-term investments:								
Certificates of deposit	—	34.0	—	34.0	—	48.1	—	48.1
Commercial paper	—	136.8	—	136.8	—	213.8	—	213.8
Corporate debt securities	—	1,038.2	—	1,038.2	—	798.0	—	798.0
U.S. government and agency securities	—	148.0	—	148.0	—	190.6	—	190.6
Non-U.S. government and agency securities	—	33.7	—	33.7	—	—	—	—
Asset-backed securities	—	11.7	—	11.7	—	4.2	—	4.2
Total short-term investments	—	1,402.4	—	1,402.4	—	1,254.7	—	1,254.7

	October 31, 2023				July 31, 2023			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Long-term investments:								
Corporate debt securities	—	2,367.0	—	2,367.0	—	2,484.3	—	2,484.3
U.S. government and agency securities	—	71.2	—	71.2	—	22.0	—	22.0
Non-U.S. government and agency securities	—	27.9	—	27.9	—	36.6	—	36.6
Asset-backed securities	—	522.8	—	522.8	—	505.0	—	505.0
Total long-term investments	—	2,988.9	—	2,988.9	—	3,047.9	—	3,047.9
Prepaid expenses and other current assets:								
Foreign currency forward contracts	—	5.6	—	5.6	—	19.1	—	19.1
Total prepaid expenses and other current assets	—	5.6	—	5.6	—	19.1	—	19.1
Other assets:								
Foreign currency forward contracts	—	—	—	—	—	1.7	—	1.7
Total other assets	—	—	—	—	—	1.7	—	1.7
Total assets measured at fair value	\$ 1,595.3	\$ 4,727.4	\$ —	\$ 6,322.7	\$ 476.1	\$ 4,474.8	\$ —	\$ 4,950.9
Accrued and other liabilities:								
Foreign currency forward contracts	\$ —	\$ 44.6	\$ —	\$ 44.6	\$ —	\$ 18.7	\$ —	\$ 18.7
Total accrued and other liabilities	—	44.6	—	44.6	—	18.7	—	18.7
Other long-term liabilities:								
Foreign currency forward contracts	—	—	—	—	—	1.6	—	1.6
Total other long-term liabilities	—	—	—	—	—	1.6	—	1.6
Total liabilities measured at fair value	\$ —	\$ 44.6	\$ —	\$ 44.6	\$ —	\$ 20.3	\$ —	\$ 20.3

Refer to Note 8. Debt for the carrying amount and estimated fair value of our convertible senior notes as of October 31, 2023 and July 31, 2023.

4. Cash Equivalents and Investments

Available-for-sale Debt Securities

The following tables summarize the amortized cost, unrealized gains and losses, and fair value of our available-for-sale debt securities as of October 31, 2023 and July 31, 2023 (in millions):

	October 31, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Commercial paper	\$ 297.0	\$ —	\$ —	\$ 297.0
Corporate debt securities	8.6	—	—	8.6
U.S. government and agency securities	24.9	—	—	24.9
Total available-for-sale cash equivalents	\$ 330.5	\$ —	\$ —	\$ 330.5
Investments:				
Certificates of deposit	\$ 34.0	\$ —	\$ —	\$ 34.0
Commercial paper	136.9	—	(0.1)	136.8
Corporate debt securities	3,453.7	0.1	(48.6)	3,405.2
U.S. government and agency securities	219.9	0.1	(0.8)	219.2
Non-U.S. government and agency securities	62.4	—	(0.8)	61.6
Asset-backed securities	539.1	0.1	(4.7)	534.5
Total available-for-sale investments	\$ 4,446.0	\$ 0.3	\$ (55.0)	\$ 4,391.3

	July 31, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Commercial paper	\$ 151.4	\$ —	\$ —	\$ 151.4
Total available-for-sale cash equivalents	\$ 151.4	\$ —	\$ —	\$ 151.4
Investments:				
Certificates of deposit	\$ 48.1	\$ —	\$ —	\$ 48.1
Commercial paper	214.1	—	(0.3)	213.8
Corporate debt securities	3,313.5	1.3	(32.5)	3,282.3
U.S. government and agency securities	214.2	—	(1.6)	212.6
Non-U.S. government and agency securities	37.2	—	(0.6)	36.6
Asset-backed securities	512.0	0.2	(3.0)	509.2
Total available-for-sale investments	\$ 4,339.1	\$ 1.5	\$ (38.0)	\$ 4,302.6

As of October 31, 2023, the gross unrealized losses that have been in a continuous unrealized loss position for less than 12 months were \$40.4 million, which were related to \$3.3 billion of available-for-sale debt securities, and the gross unrealized losses that have been in a continuous unrealized loss position for more than 12 months were \$14.6 million, which were related to \$922.5 million of available-for-sale debt securities. As of July 31, 2023 the gross unrealized losses that have been in a continuous unrealized loss position for less than 12 months were \$30.7 million, which were related to \$3.4 billion of available-for-sale debt securities, and the gross unrealized losses that have been in a continuous unrealized loss position for more than 12 months were \$7.3 million, which were related to \$481.8 million of available-for-sale debt securities.

Unrealized losses related to our available-for-sale debt securities are primarily due to interest rate fluctuations as opposed to credit quality. We do not intend to sell any of the securities in an unrealized loss position and it is not likely that we would be required to sell these securities before recovery of their amortized cost basis, which may be at maturity. We did not recognize any credit losses related to our available-for-sale debt securities during the three months ended October 31, 2023 and 2022.

The following table summarizes the amortized cost and fair value of our available-for-sale debt securities as of October 31, 2023, by contractual years-to-maturity (in millions):

	Amortized Cost	Fair Value
Due within one year	\$ 1,742.4	\$ 1,732.9
Due between one and three years	2,173.8	2,145.2
Due between three and five years	743.4	728.1
Due between five and ten years	61.3	60.8
Due after ten years	55.6	54.8
Total	<u>\$ 4,776.5</u>	<u>\$ 4,721.8</u>

Marketable Equity Securities

Marketable equity securities consist of money market funds and are included in cash and cash equivalents on our condensed consolidated balance sheets. As of October 31, 2023 and July 31, 2023, the carrying values of our marketable equity securities were \$1.6 billion and \$476.1 million, respectively. There were no unrealized gains or losses recognized for these securities during the three months ended October 31, 2023 and 2022.

5. Financing Receivables

The following table summarizes our short-term and long-term financing receivables as of October 31, 2023 and July 31, 2023 (in millions):

	October 31, 2023	July 31, 2023
Short-term financing receivables, gross	\$ 499.8	\$ 435.1
Unearned income	(49.3)	(42.9)
Allowance for credit losses	(4.6)	(3.4)
Short-term financing receivables, net	<u>\$ 445.9</u>	<u>\$ 388.8</u>
Long-term financing receivables, gross	\$ 689.8	\$ 698.6
Unearned income	(42.0)	(39.2)
Allowance for credit losses	(8.0)	(6.1)
Long-term financing receivables, net	<u>\$ 639.8</u>	<u>\$ 653.3</u>

Our financing receivables portfolio primarily consisted of high-quality investment-grade receivables as of October 31, 2023 and July 31, 2023. There was no significant activity in allowance for credit losses during the three months ended October 31, 2023 and 2022. Past due amounts on financing receivables were not material as of October 31, 2023 and July 31, 2023.

6. Derivative Instruments

We are exposed to foreign currency exchange risk. Our revenue is transacted in U.S. dollars, however, a portion of our operating expenditures are incurred outside of the United States and are denominated in foreign currencies, making them subject to fluctuations in foreign currency exchange rates. We enter into foreign currency derivative contracts with maturities of 24 months or less, which we designate as cash flow hedges, to manage the foreign currency exchange risk associated with our operating expenditures.

As of October 31, 2023 and July 31, 2023, the total notional amount of our outstanding foreign currency forward contracts was \$777.9 million and \$957.5 million, respectively. Refer to Note 3. Fair Value Measurements for the fair value of our derivative instruments as reported on our condensed consolidated balance sheets as of October 31, 2023 and July 31, 2023.

As of October 31, 2023, unrealized gains and losses in accumulated other comprehensive income ("AOCI") related to our cash flow hedges were a \$31.0 million net loss, of which \$29.0 million in losses are expected to be recognized into earnings within the next 12 months. As of July 31, 2023, unrealized gains and losses in AOCI related to our cash flow hedges were a \$0.7 million net gain.

7. Intangible Assets

Purchased Intangible Assets

The following table presents details of our purchased intangible assets as of October 31, 2023 and July 31, 2023 (in millions):

	October 31, 2023			July 31, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets subject to amortization:						
Developed technology	\$ 633.2	\$ (448.5)	\$ 184.7	\$ 633.2	\$ (429.4)	\$ 203.8
Customer relationships	172.7	(79.3)	93.4	172.7	(73.9)	98.8
Acquired intellectual property	14.6	(6.5)	8.1	14.6	(6.2)	8.4
Trade name and trademarks	9.4	(9.4)	—	9.4	(9.4)	—
Other	0.9	(0.5)	0.4	0.9	(0.4)	0.5
Total intangible assets subject to amortization	830.8	(544.2)	286.6	830.8	(519.3)	311.5
Intangible assets not subject to amortization:						
In-process research and development	3.9	—	3.9	3.9	—	3.9
Total purchased intangible assets	\$ 834.7	\$ (544.2)	\$ 290.5	\$ 834.7	\$ (519.3)	\$ 315.4

We recognized amortization expense of \$24.9 million and \$29.1 million for the three months ended October 31, 2023 and 2022, respectively.

The following table summarizes estimated future amortization expense of our intangible assets subject to amortization as of October 31, 2023 (in millions):

	Fiscal years ending July 31,						
	Total	Remaining 2024	2025	2026	2027	2028	2029 and Thereafter
Future amortization expense	\$ 286.6	\$ 73.0	\$ 84.2	\$ 62.4	\$ 35.3	\$ 13.7	\$ 18.0

8. Debt

Convertible Senior Notes

In July 2018, we issued \$1.7 billion aggregate principal amount of 0.75% Convertible Senior Notes due 2023 (the "2023 Notes") and in June 2020, we issued \$2.0 billion aggregate principal amount of 0.375% Convertible Senior Notes due 2025 (the "2025 Notes," and together with the 2023 Notes, the "Notes"). The 2023 Notes were converted prior to or settled on the maturity date of July 1, 2023 in accordance with their terms. The 2025 Notes bear interest at a fixed rate of 0.375% per year, payable semi-annually in arrears on June 1 and December 1 of each year, beginning on December 1, 2020. The 2025 Notes are governed by an indenture between us, as the issuer, and U.S. Bank National Association, as Trustee (the "Indenture"). The 2025 Notes are unsecured, unsubordinated obligations and the Indenture governing the 2025 Notes does not contain any financial covenants or restrictions on the payments of dividends, the incurrence of indebtedness, or the issuance or repurchase of securities by us or any of our subsidiaries. The 2025 Notes mature on June 1, 2025. We may redeem for cash all or any portion of the 2025 Notes, at our option, on or after June 5, 2023 and prior to the 31st scheduled trading day immediately preceding the maturity date if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days during any 30 consecutive trading day period ending on and including the trading day preceding the date on which we provide notice of redemption. The redemption will be at a price equal to 100% of the principal amount of the 2025 Notes and adjusted for interest. If we call any or all of the 2025 Notes for redemption, holders may convert such 2025 Notes called for redemption at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date.

The 2025 Notes are convertible for an initial 20.1 million shares of our common stock at a conversion rate of approximately 10.0806 shares of common stock per \$1,000 principal amount, which is equal to an initial conversion price of approximately \$99.20 per share of common stock, subject to adjustments. Holders of the 2025 Notes may surrender their 2025 Notes for conversion at their option at any time prior to the close of business on the business day immediately preceding March 1, 2025 only under the following circumstances:

- during any fiscal quarter commencing after the fiscal quarters ending on October 31, 2020 (and only during such fiscal quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding fiscal quarter is greater than or equal to 130% of the conversion price for the 2025 Notes on each applicable trading day (the “sale price condition”);
- during the five business day period after any five consecutive trading day period (the “measurement period”) in which the trading price per \$1,000 principal amount of the 2025 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate for the 2025 Notes on each such trading day; or
- upon the occurrence of specified corporate events.

On or after March 1, 2025, holders may surrender all or any portion of their 2025 Notes for conversion at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date regardless of the foregoing conditions, and such conversions will be settled upon the maturity date. Upon conversion, holders of the 2025 Notes will receive cash equal to the aggregate principal amount of the 2025 Notes to be converted, and, at our election, cash and/or shares of our common stock for any amounts in excess of the aggregate principal amount of the 2025 Notes being converted.

The conversion price will be subject to adjustment in some events. Holders of the 2025 Notes who convert their 2025 Notes in connection with certain corporate events that constitute a “make-whole fundamental change” under the Indenture are, under certain circumstances, entitled to an increase in the conversion rate. Additionally, upon the occurrence of a corporate event that constitutes a “fundamental change” under the Indenture, holders of the 2025 Notes may require us to repurchase for cash all or a portion of the 2025 Notes at a repurchase price equal to 100% of the principal amount of the 2025 Notes plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

Holders of the 2025 Notes were able to early convert their 2025 Notes during the fiscal quarter ended October 31, 2023 as the sales price condition had been met during the fiscal quarter ended July 31, 2023. During the three months ended October 31, 2023, holders of the 2025 Notes converted \$46.0 million in aggregate principal amount of the 2025 Notes, which we repaid in cash. We also issued 0.3 million shares of our common stock to the holders of the 2025 Notes for the conversion value in excess of the principal amount. These shares were fully offset by shares we received from the corresponding exercise of the associated note hedges.

The sale price condition for the 2025 Notes was met during the fiscal quarter ended October 31, 2023 and as a result, holders may convert their 2025 Notes during the fiscal quarter ending January 31, 2024. The net carrying amount of the 2025 Notes was classified as a current liability on our condensed consolidated balance sheet as of October 31, 2023.

The following table sets forth the net carrying amount of our 2025 Notes (in millions):

	October 31, 2023	July 31, 2023
Principal	\$ 1,953.3	\$ 1,999.3
Less: debt issuance costs, net of amortization	(6.6)	(7.8)
Net carrying amount	<u>\$ 1,946.7</u>	<u>\$ 1,991.5</u>

The total estimated fair value of the 2025 Notes was \$4.8 billion as of October 31, 2023 and \$5.0 billion as of July 31, 2023, respectively. The fair value was determined based on the closing trading price per \$100 of the 2025 Notes as of the last day of trading for the period. We consider the fair value of the 2025 Notes as of October 31, 2023 and July 31, 2023 to be a Level 2 measurement. The fair value of the 2025 Notes is primarily affected by the trading price of our common stock and market interest rates.

The following table sets forth interest expense recognized related to the Notes (dollars in millions):

	Three Months Ended October 31,					
	2023			2022		
	2023 Notes	2025 Notes	Total	2023 Notes	2025 Notes	Total
Contractual interest expense	\$ —	\$ 1.9	\$ 1.9	\$ 3.2	\$ 1.8	\$ 5.0
Amortization of debt issuance costs	—	1.0	1.0	0.7	1.1	1.8
Total interest expense	\$ —	\$ 2.9	\$ 2.9	\$ 3.9	\$ 2.9	\$ 6.8
Effective interest rate	— %	0.6 %		0.9 %	0.6 %	

Note Hedges

To minimize the impact of potential economic dilution upon conversion of our convertible senior notes, we entered into separate convertible note hedge transactions (the “2023 Note Hedges,” with respect to the 2023 Notes, the “2025 Note Hedges,” with respect to the 2025 Notes, and the 2023 Note Hedges together with 2025 Note Hedges, the “Note Hedges”) with respect to our common stock concurrent with the issuance of each series of the Notes.

Upon the settlement of the 2023 Notes, we exercised the corresponding portion of our 2023 Note Hedges during the year ended July 31, 2023 and received shares of our common stock that fully offset the shares issued in excess of the principal amount of the converted 2023 Notes. The 2023 Note Hedges expired upon maturity of the 2023 Notes.

The 2025 Note Hedges cover up to 20.1 million shares of our common stock at a strike price per share that corresponds to the initial conversion price of the 2025 Notes, which are also subject to adjustment, and are exercisable upon conversion of the 2025 Notes. The 2025 Note Hedges will expire upon maturity of the 2025 Notes. The 2025 Note Hedges are separate transactions and are not part of the terms of the 2025 Notes. Holders of the 2025 Notes will not have any rights with respect to the 2025 Note Hedges. Any shares of our common stock receivable by us under the 2025 Note Hedges are excluded from the calculation of diluted earnings per share as they are antidilutive. We paid an aggregate amount of \$370.8 million for the 2025 Note Hedges, which is included in additional paid-in capital on our condensed consolidated balance sheets.

As a result of the conversions of the 2025 Notes settled during the three months ended October 31, 2023, we exercised the corresponding portion of our 2025 Note Hedges and received 0.3 million shares of our common stock during the period.

Warrants

Separately, but concurrently with the issuance of each series of our convertible senior notes, we entered into transactions whereby we sold warrants (the “2023 Warrants,” with respect to the 2023 Notes, the “2025 Warrants,” with respect to the 2025 Notes, and the 2023 Warrants together with the 2025 Warrants, the “Warrants”) to acquire shares of our common stock, subject to anti-dilution adjustments. The 2023 Warrants and 2025 Warrants are exercisable over 60 scheduled trading days beginning October 2023 and September 2025, respectively.

The following table presents details of our Warrants (in millions, except per share data):

	Initial Number of Shares	Strike Price per Share	Aggregate Proceeds
2023 Warrants	19.1	\$ 139.27	\$ 145.4
2025 Warrants	20.1	\$ 136.16	\$ 202.8

The shares issuable under the Warrants are included in the calculation of diluted earnings per share when the average market value per share of our common stock for the reporting period exceeds the applicable strike price for such series of Warrants. The Warrants are separate transactions and are not part of either series of Notes or Note Hedges and are not remeasured through earnings each reporting period. Holders of the Notes of either series will not have any rights with respect to the Warrants. The aggregate proceeds received from the sale of the Warrants are included in additional paid-in capital on our condensed consolidated balance sheets.

During the three months ended October 31, 2023, we net settled a portion of the 2023 Warrants with 3.1 million shares of our common stock with a fair value of \$763.5 million. The number of net shares issued was determined based on the number of 2023 Warrants exercised multiplied by the difference between the strike price of the 2023 Warrants and their daily volume-weighted-average stock price. As of October 31, 2023, up to 12.1 million shares of our common stock were issuable for gross settlement under the remaining outstanding 2023 Warrants, which will be net settled when exercised through the end of December 2023.

Revolving Credit Facility

On April 13, 2023, we entered into a credit agreement (the “Credit Agreement”) with certain institutional lenders that provides for a \$400.0 million unsecured revolving credit facility (the “Credit Facility”), with an option to increase the amount of the Credit Facility by up to an additional \$350.0 million, subject to certain conditions. The Credit Facility matures on April 13, 2028.

The borrowings under the Credit Facility bear interest, at our option, at a base rate plus a spread of 0.000% to 0.375%, or an adjusted term Secured Overnight Financing Rate (“SOFR”) plus a spread of 1.000% to 1.375%, in each case with such spread being determined based on our leverage ratio. We are obligated to pay an ongoing commitment fee on undrawn amounts at a rate of 0.090% to 0.150%, depending on our leverage ratio. The interest rates and commitment fees are also subject to upward and downward adjustments based on our progress towards the achievement of certain sustainability goals related to greenhouse gas emissions.

As of October 31, 2023, there were no amounts outstanding and we were in compliance with all covenants under the Credit Agreement.

9. Commitments and Contingencies

Purchase Commitments

Manufacturing Purchase Commitments

In order to reduce manufacturing lead times and plan for adequate supply, we enter into agreements with manufacturing partners and component suppliers to procure inventory based on our demand forecasts. The following table presents details of the aggregate future minimum or fixed purchase commitments under these arrangements, excluding obligations under contracts that we can cancel as of October 31, 2023 (in millions):

	Fiscal years ending July 31,						
	Total	Remaining 2024	2025	2026	2027	2028	2029 and Thereafter
Manufacturing purchase commitments	\$ 188.2	\$ 113.2	\$ 35.0	\$ 40.0	\$ —	\$ —	\$ —

Other Purchase Commitments

We have entered into various non-cancelable agreements with certain service providers, under which we are committed to minimum or fixed purchases. The following table presents details of the aggregate future non-cancelable purchase commitments under these agreements as of October 31, 2023 (in millions):

	Fiscal years ending July 31,						
	Total	Remaining 2024	2025	2026	2027	2028	2029 and Thereafter
Other purchase commitments	\$ 1,383.3	\$ 11.3	\$ 387.4	\$ 499.4	\$ 483.8	\$ 0.6	\$ 0.8

Additionally, we have a \$153.3 million minimum purchase commitment with a service provider through September 2027 with no specified annual commitments.

Guarantee

In October 2023, we established a multi-currency notional cash pool for a certain number of our entities with a third-party bank. As part of the notional cash pool agreement, the bank extends overdraft credit to our participating entities as needed, provided that the overall notionally pooled balance of all accounts in the pool at the end of each day is positive. In the unlikely event of a default, any overdraft balances incurred would be guaranteed by our collective entities participating in the pool.

Litigation

We are subject to legal proceedings, claims, tax matters, and litigation arising in the ordinary course of business, including, for instance, intellectual property and patent litigation. We accrue for contingencies when we believe that a loss is probable and that we can reasonably estimate the amount of any such loss. As of October 31, 2023, we have not recorded any significant accruals for loss contingencies associated with such matters.

Legal matters could include speculative, substantial or indeterminate monetary amounts. Significant judgment is required to determine both the likelihood of there being a loss and the estimated amount of a loss related to such matters, and we may be unable to estimate the reasonably possible loss or range of loss. The outcomes of outstanding legal matters are inherently unpredictable, and could, either individually or in aggregate, have a material adverse effect on us and our results of operations. To the extent there is a reasonable possibility that a loss exceeding any amounts already recognized may be incurred, we will either disclose the estimated additional loss or state that such an estimate cannot be made.

The following matters arose in the ordinary course of business.

Centripetal Networks, Inc. v. Palo Alto Networks

On March 12, 2021, Centripetal Networks, Inc., filed a lawsuit against us in the United States District Court for the Eastern District of Virginia ("E.D.VA"). The lawsuit alleges that our products infringe multiple Centripetal patents. We successfully challenged certain of these patents, which were found unpatentable by the U.S. Patent and Trademark Office. The complaint requests injunctive relief, monetary damages, and attorneys fees. The US District Court E.D.VA has set a trial date of January 22, 2024 on the remaining patents. In addition, Centripetal filed infringement contentions on certain of their patents in the European Patent Office in Germany, to which we filed invalidity challenges. Those matters are still pending. We are unable, at this time, to reasonably estimate a possible loss or potential range of loss, if any.

Finjan, Inc. v. Palo Alto Networks

On November 4, 2014, Finjan, Inc., filed a lawsuit against us in the United States District Court for the Northern District of California. The lawsuit alleges that our products infringe multiple Finjan patents. The complaint requests injunctive relief, monetary damages, and attorneys fees. The court has moved the trial date from April 8, 2024 to October 21, 2024. We are unable, at this time, to reasonably estimate a possible loss or potential range of loss, if any.

Taasera v. Palo Alto Networks

On March 22, 2022, we filed a declaratory judgment action in the United States District Court for the Southern District of New York ("S.D.N.Y") seeking a ruling that we are not infringing various Taasera patents. Taasera challenged jurisdiction in S.D.N.Y, which issue is currently on appeal with the Federal Circuit. Pursuant to an order of the Judicial Panel on Multidistrict Litigation, this matter has been consolidated in the United States District Court for the Eastern District of Texas with several other patent infringement matters brought by Taasera. The court moved the start date to April 15, 2024, as the start of consecutive trials of these consolidated matters. The complaint requests injunctive relief, monetary damages, and attorneys fees. We are unable, at this time, to reasonably estimate a possible loss or potential range of loss, if any.

10. Stockholders' Equity

Share Repurchase Program

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program, which is funded from available working capital. In December 2020, August 2021, and August 2022, our board of directors authorized additional \$700.0 million, \$676.1 million, and \$915.0 million increases to this share repurchase program, respectively, bringing the total authorization under this share repurchase program to \$3.3 billion (our "current authorization"). The expiration date of our current authorization was extended to December 31, 2023, and our repurchase program may be suspended or discontinued at any time. Repurchases may be made at management's discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing.

During the three months ended October 31, 2023, we repurchased and retired 0.3 million shares of our common stock under our current repurchase authorization for an aggregate purchase price of \$66.7 million, including transaction costs, at an average price of \$226.67. During the three months ended October 31, 2022, we did not repurchase shares of our common stock, and paid \$22.7 million related to share repurchases of our common stock that were not settled as of July 31, 2022.

As of October 31, 2023, \$683.3 million remained available for future share repurchases under our current repurchase authorization. The total price of the shares repurchased and related transaction costs are reflected as a reduction to common stock and additional paid-in capital on our condensed consolidated balance sheets.

11. Equity Award Plans

Restricted Stock Unit (“RSU”) and Performance-Based Stock Unit (“PSU”) Activities

The following table summarizes the RSU and PSU activity under our stock plans during the three months ended October 31, 2023 (in millions, except per share amounts):

	RSUs Outstanding			PSUs Outstanding		
	Number of Shares	Weighted-Average Grant-Date Fair Value Per Share	Aggregate Intrinsic Value	Number of Shares	Weighted-Average Grant-Date Fair Value Per Share	Aggregate Intrinsic Value
Balance—July 31, 2023	12.1	\$ 142.61	\$ 3,013.0	5.0	\$ 128.64	\$ 1,242.3
Granted ⁽¹⁾	0.5	\$ 245.46		2.1	\$ 183.03	
Vested	(1.6)	\$ 123.43		(0.5)	\$ 145.93	
Forfeited	(0.4)	\$ 143.47		(0.4)	\$ 133.97	
Balance—October 31, 2023	10.6	\$ 150.58	\$ 2,574.9	6.2	\$ 145.51	\$ 1,516.4

⁽¹⁾ For PSUs, shares granted represent the aggregate maximum number of shares that may be earned and issued with respect to these awards over their full terms.

Our RSUs generally vest over a period of three to four years from the date of grant. Until vested, RSUs do not have the voting and dividend participation rights of common stock and the shares underlying the awards are not considered issued and outstanding.

Our PSUs generally vest over a period of one to four years from the date of grant. The number of PSUs eligible to vest is determined based on the level of achievement against certain performance conditions, market conditions, and a combination thereof.

During the three months ended October 31, 2023 and 2022, we granted 2.0 million and 1.6 million shares of PSUs, respectively, which contain service, performance and market conditions. The service conditions are satisfied after a period of one to three years. The performance conditions are based on revenue growth or billing growth. The market condition is measured based on our total shareholder return (“TSR”) relative to the TSR of the companies listed in the Standard & Poor’s 500 index. As of October 31, 2023, we have approved 2.7 million shares of PSUs, which will be granted upon the performance condition being established during the next two fiscal years.

The fair value of the PSUs subject to market conditions is estimated on the grant date using a Monte Carlo simulation model. The following table summarizes the assumptions used and the resulting grant-date fair value of our PSUs subject to market conditions granted during the three months ended October 31, 2023 and 2022:

	Three Months Ended October 31,	
	2023	2022
Volatility	40.8% - 43.4%	39.6% - 44.8%
Expected term (in years)	0.9 - 2.9	1.0 - 4.0
Dividend yield	0.0 %	0.0 %
Risk-free interest rate	4.9% - 5.3%	3.2% - 3.6%
Grant-date fair value per share	\$346.92 - \$394.63	\$105.60 - \$280.41

Performance Stock Option (“PSO”) Activities

We have granted PSOs with both service and market conditions. The market conditions were achieved when certain stock price targets were met. As of October 31, 2023, all of our outstanding PSOs have been fully vested. The maximum contractual term of our outstanding PSOs is seven and a half years from the date of grant in fiscal year 2018 and 2019.

The following table summarizes the PSO activity under our stock plans during the three months ended October 31, 2023 (in millions, except per share amounts):

	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance—July 31, 2023	6.4	\$ 65.20	2.2	\$ 1,184.6
Exercised	(0.1)	\$ 64.50		
Balance—October 31, 2023	6.3	\$ 65.22	1.9	\$ 1,116.0
Exercisable—October 31, 2023	6.3	\$ 65.22	1.9	\$ 1,116.0

Share-Based Compensation

The following table summarizes share-based compensation included in costs and expenses (in millions):

	Three Months Ended October 31,	
	2023	2022
Cost of product revenue	\$ 2.4	\$ 2.4
Cost of subscription and support revenue	30.6	28.8
Research and development	120.1	118.0
Sales and marketing	79.2	87.4
General and administrative	38.7	29.4
Total share-based compensation	\$ 271.0	\$ 266.0

As of October 31, 2023, total compensation cost related to unvested share-based awards not yet recognized was \$1.9 billion. This cost is expected to be amortized over a weighted-average period of approximately 2.7 years.

12. Income Taxes

For the three months ended October 31, 2023 and 2022, our provision for income taxes reflected effective tax rates of 31.3% and 41.9%, respectively.

Our income taxes for the three months ended October 31, 2023 and 2022 were primarily due to U.S. federal and state income taxes, withholding taxes, and foreign income taxes. Our effective tax rate decreased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to higher tax benefits from our share-based compensation. Our effective tax rates differed from the U.S. statutory tax rate primarily due to changes in our valuation allowance.

We maintain a full valuation allowance for domestic and certain foreign deferred tax assets, including net operating loss carryforwards and certain domestic tax credits. We regularly evaluate the need for a valuation allowance. Due to recent profitability, a reversal of our valuation allowance in certain jurisdictions in the near future is reasonably possible.

13. Net Income Per Share

Basic net income per share is computed by dividing net income by basic weighted-average shares outstanding during the period. Diluted net income per share is computed by dividing net income by diluted weighted-average shares outstanding during the period giving effect to all potentially dilutive securities to the extent they are dilutive. Potentially dilutive securities include shares issuable upon conversion of our convertible senior notes using the if-converted method, warrants related to the issuance of convertible senior notes, and equity awards under our employee equity incentive plans using the treasury stock method.

The following table presents the computation of basic and diluted net income per share of common stock (in millions, except per share data):

	Three Months Ended October 31,	
	2023	2022
Net income	\$ 194.2	\$ 20.0
Weighted-average shares used to compute net income per share, basic	310.1	299.8
Weighted-average effect of potentially dilutive securities:		
Convertible senior notes	11.6	17.8
Warrants related to the issuance of convertible senior notes	16.0	7.8
Employee equity incentive plans	12.1	13.0
Weighted-average shares used to compute net income per share, diluted	349.8	338.4
Net income per share, basic	\$ 0.63	\$ 0.07
Net income per share, diluted	\$ 0.56	\$ 0.06

The following securities were excluded from the computation of diluted net income per share of common stock as their effect would have been antidilutive or issuance of such shares is contingent upon the satisfaction of certain conditions which were not satisfied by the end of the applicable period (in millions):

	Three Months Ended October 31,	
	2023	2022
Employee equity incentive plans	2.6	2.7

14. Other Income, Net

The following table sets forth the components of other income, net (in millions):

	Three Months Ended October 31,	
	2023	2022
Interest income	\$ 71.2	\$ 29.4
Foreign currency exchange gains (losses), net	5.1	4.4
Other, net	(6.0)	(7.8)
Total other income, net	\$ 70.3	\$ 26.0

15. Subsequent Events

Acquisitions

On October 29, 2023, we entered into a definitive agreement to acquire Dig Security Solutions Ltd., a privately-held cyber security company ("Dig"), for total consideration of approximately \$295.0 million, including approximately \$232.0 million in cash and approximately \$63.0 million in replacement awards, subject to adjustment. We expect the acquisition will enhance our Prisma Cloud capabilities with a data security posture management solution that is intended to provide customers with visibility into, and secure data stored across, their multi-cloud environments.

On November 6, 2023, we entered into a definitive agreement to acquire Talon Cyber Security Ltd., a privately-held cyber security company ("Talon"), for total consideration of approximately \$550.0 million, including approximately \$434.9 million in cash and approximately \$115.1 million in replacement awards, subject to adjustment. We expect the acquisition will support Prisma SASE's approach to provide secure access to business applications for unmanaged and personal devices with an enterprise browser.

The proposed acquisitions of Dig and Talon are expected to close during our second quarter of fiscal 2024, subject to the satisfaction of customary closing conditions.

Share Repurchase

On November 16, 2023, our board of directors authorized a \$316.7 million increase to our share repurchase program, bringing the total remaining authorization for future share repurchases to \$1.0 billion. The expiration date of the repurchase authorization was extended to December 31, 2024, and our repurchase program may be suspended or discontinued at any time without prior notice. Repurchases may be made at management's discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q, including, without limitation, the following discussion and analysis, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements include, but are not limited to, statements concerning: our expectations regarding drivers of and factors affecting growth in our business; statements regarding expected profitability, trends in billing, our mix of product and subscription and support revenue, cost of revenue, gross margin, cash flows, operating expenses, including future share-based compensation expense, income taxes, investment plans, and liquidity; expected recurring revenues resulting from growth in our end-customers and increased adoption of our products and cloud delivered security solutions; the performance advantages of our products and subscription and support offerings and the potential benefits to our customers; our expectations regarding future investments in research and development and product development, customer support, in our employees and in our sales force, including expectations regarding growth in our sales headcount; our expectation that we will continue to expand our global presence; expectations regarding our revenues, including the seasonality and cyclical nature from quarter to quarter; our expectation that we will increase our customer financing activities; the sufficiency of our cash flow from operations with existing cash, cash equivalents, and investments to meet our cash needs for the foreseeable future; our ability to successfully acquire and integrate companies and assets and our expectations and intentions with respect to the products and technologies that we acquire and introduce; the timing and amount of capital expenditures and share repurchases; the effects of worldwide economic and geopolitical conditions, including but not limited to recent hostilities in Israel, inflation, interest rate levels, growth rates and other conditions, on our operating and financial results and performance; the manufacture, delivery and cost of certain of our products; the effects of current or potential litigation or regulatory developments involving us or affecting our industry; and other statements regarding our future operations, financial condition and prospects, and business strategies. Forward-looking statements generally can be identified by words such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potentially,” “projects,” “will,” “will be,” “will continue,” “will likely result,” “would” and similar expressions that convey uncertainty of future events or outcomes. These forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those anticipated or implied by any forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Quarterly Report on Form 10-Q and, in particular, the risks discussed under the caption “Risk Factors” in Part II, Item 1A of this report and those discussed in other documents we file with the Securities and Exchange Commission (“SEC”). We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

Our Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) is organized as follows:

- **Overview.** A discussion of our business and overall analysis of financial and other highlights in order to provide context for the remainder of MD&A.
- **Key Financial Metrics.** A summary of our U.S. GAAP and non-GAAP key financial metrics, which management monitors to evaluate our performance.
- **Results of Operations.** A discussion of the nature and trends in our financial results and an analysis of our financial results comparing the three months ended October 31, 2023 to the three months ended October 31, 2022.
- **Liquidity and Capital Resources.** An analysis of changes on our balance sheets and cash flows, and a discussion of our financial condition and our ability to meet cash needs.
- **Critical Accounting Estimates.** A discussion of our accounting policies that require critical estimates, assumptions, and judgments.

Overview

We empower enterprises, organizations, service providers, and government entities to protect themselves against today's most sophisticated cyber threats. Our cybersecurity platforms and services help secure enterprise users, networks, clouds, and endpoints by delivering comprehensive cybersecurity backed by industry-leading artificial intelligence and automation. We are a leading provider of zero trust solutions, starting with next-generation zero trust network access to secure today's remote hybrid workforces and extending to securing all users, applications, and infrastructure with zero trust principles. Our security solutions are designed to reduce customers' total cost of ownership by improving operational efficiency and eliminating the need for siloed point products. Our company focuses on delivering value in four fundamental areas:

Network Security:

- Our network security platform, designed to deliver complete zero trust solutions to our customers, includes our hardware and software ML-Powered Next-Generation Firewalls, as well as a cloud-delivered Secure Access Service Edge ("SASE"). Prisma® Access, our Security Services Edge ("SSE") solution, when combined with Prisma SD-WAN, provides a comprehensive single-vendor SASE offering that is used to secure remote workforces and enable the cloud-delivered branch. We have been recognized as a leader in network firewalls, SASE, SSE, and SD-WAN. Our network security platform also includes our cloud-delivered security services, such as Advanced Threat Prevention, Advanced WildFire®, Advanced URL Filtering, DNS Security, IoT/OT Security, GlobalProtect®, Enterprise Data Loss Prevention ("Enterprise DLP"), Artificial Intelligence for Operations ("AIOps"), SaaS Security API, and SaaS Security Inline. Through these add-on security services, our customers are able to secure their content, applications, users, and devices across their entire organization. Panorama®, our network security management solution, can centrally manage our network security platform irrespective of form factor, location, or scale.

Cloud Security:

- We enable cloud-native security through our Prisma Cloud platform. As a comprehensive Cloud Native Application Protection Platform ("CNAPP"), Prisma Cloud secures multi- and hybrid-cloud environments for applications, data, and the entire cloud native technology stack across the full development lifecycle, from code to runtime. For inline network security on multi- and hybrid-cloud environments, we also offer our VM-Series and CN-Series Firewall offerings.

Security Operations:

- We deliver the next generation of security automation, security analytics, endpoint security, and attack surface management solutions through our Cortex portfolio. These include Cortex XSIAM, our AI-driven security automation platform, Cortex XDR® for the prevention, detection, and response to complex cybersecurity attacks on the endpoint, Cortex XSOAR® for security orchestration, automation, and response ("SOAR"), and Cortex Xpanse™ for attack surface management ("ASM"). These products are delivered as SaaS or software subscriptions.

Threat Intelligence and Security Consulting (Unit 42):

- Unit 42 brings together world-renowned threat researchers with an elite team of incident responders and security consultants to create an intelligence-driven, response-ready organization to help customers proactively manage cyber risk. Our consultants serve as trusted advisors to our customers by assessing and testing their security controls against the right threats, transforming their security strategy with a threat-informed approach, and responding to security incidents on behalf of our clients.

For the first quarter of fiscal 2024 and 2023, total revenue was \$1.9 billion and \$1.6 billion, respectively, representing year-over-year growth of 20.1%. Our growth reflects the increased adoption of our portfolio, which consists of product, subscriptions, and support. We believe our portfolio will enable us to benefit from recurring revenues and new revenues as we continue to grow our end-customer base. As of October 31, 2023, we had end-customers in over 180 countries. Our end-customers represent a broad range of industries, including education, energy, financial services, government entities, healthcare, Internet and media, manufacturing, public sector, and telecommunications, and include almost all of the Fortune 100 companies and a majority of the Global 2000 companies. We maintain a field sales force that works closely with our channel partners in developing sales opportunities. We primarily use a two-tiered, indirect fulfillment model whereby we sell our products, subscriptions, and support to our distributors, which, in turn, sell to our resellers, which then sell to our end-customers.

Our product revenue grew to \$341.1 million, or 18.2% of total revenue, for the first quarter of fiscal 2024, representing year-over-year growth of 3.4%. Product revenue is derived from sales of our appliances, primarily our ML-Powered Next-Generation Firewall. Product revenue also includes revenue derived from software licenses of Panorama, SD-WAN, and the VM-Series. Our ML-Powered Next-Generation Firewall incorporates our PAN-OS operating system, which provides a consistent set of capabilities across our entire network security product line. Our appliances and software licenses include a broad set of built-in networking and security features and functionalities. Our products are designed for different performance requirements throughout an organization, ranging from our PA-410, which is designed for small organizations and remote or branch offices, to our top-of-the-line PA-7080, which is designed for large-scale data centers and service provider use. The same firewall functionality that is delivered in our physical appliances is also available in our VM-Series virtual firewalls, which secure virtualized and cloud-based computing environments, and in our CN-Series container firewalls, which secure container environments and traffic.

Our subscription and support revenue grew to \$1.5 billion, or 81.8% of total revenue, for the first quarter of fiscal 2024, representing year-over-year growth of 24.6%. Our subscriptions provide our end-customers with near real-time access to the latest antivirus, intrusion prevention, web filtering, modern malware prevention, data loss prevention, and cloud access security broker capabilities across the network, endpoints, and the cloud. When end-customers purchase our physical, virtual, or container firewall appliances, or certain cloud offerings, they typically purchase support in order to receive ongoing security updates, upgrades, bug fixes, and repairs. In addition to the subscriptions purchased with these appliances, end-customers may also purchase other subscriptions on a per-user, per-endpoint, or capacity-based basis. We also offer professional services, including incident response, risk management, and digital forensic services.

We continue to invest in innovation as we evolve and further extend the capabilities of our portfolio, as we believe that innovation and timely development of new features and products are essential to meeting the needs of our end-customers and improving our competitive position. For example, in October 2023, we enhanced our Prisma Cloud capabilities with new integrated Code to Cloud intelligence for developers, operations, and security teams to improve productivity and collaboration across code, infrastructure, and runtime.

We believe that the growth of our business and our short-term and long-term success are dependent upon many factors, including our ability to extend our technology leadership, grow our base of end-customers, expand deployment of our portfolio and support offerings within existing end-customers, and focus on end-customer satisfaction. To manage any future growth effectively, we must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems and controls, and our ability to manage headcount, capital, and processes in an efficient manner. While these areas present significant opportunities for us, they also pose challenges and risks that we must successfully address in order to sustain the growth of our business and improve our operating results. For additional information regarding the challenges and risks we face, see the "Risk Factors" section in Part II, Item 1A of this Quarterly Report on Form 10-Q.

Impact of Macroeconomic Developments and Other Factors on Our Business

Our overall performance depends in part on worldwide economic and geopolitical conditions and their impact on customer behavior. Worsening economic conditions, including inflation, higher interest rates, slower growth, fluctuations in foreign exchange rates, supply chain disruptions, and other conditions, may adversely affect our results of operations and financial performance.

The recent hostilities in Israel and the surrounding region have increased the levels of economic and political uncertainty. While we have business operations in Israel, and intend to continue growing our presence in Israel, we currently do not expect significant business disruption. We are actively monitoring, evaluating, and responding to the developing situation.

We are also monitoring the impact of inflationary pressures and the tensions between China and Taiwan, and between the U.S. and China, which could have an adverse impact on our business or results of operations in future periods.

Key Financial Metrics

We monitor the key financial metrics set forth in the tables below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts, and assess operational efficiencies. We discuss revenue, gross margin, and the components of operating income and margin below under “Results of Operations.”

	October 31, 2023		July 31, 2023	
	(in millions)			
Total deferred revenue	\$	9,442.8	\$	9,296.4
Cash, cash equivalents, and investments	\$	6,882.7	\$	5,437.9

	Three Months Ended October 31,			
	2023		2022	
	(dollars in millions)			
Total revenue	\$	1,878.1	\$	1,563.4
Total revenue year-over-year percentage increase		20.1 %		25.3 %
Gross margin		74.8 %		70.5 %
Operating income	\$	215.2	\$	15.2
Operating margin		11.5 %		1.0 %
Billings	\$	2,024.5	\$	1,749.0
Billings year-over-year percentage increase		15.8 %		26.6 %
Cash flow provided by operating activities	\$	1,526.0	\$	1,236.7
Free cash flow (non-GAAP)	\$	1,489.2	\$	1,197.1

- **Deferred Revenue.** Our deferred revenue primarily consists of amounts that have been invoiced but have not been recognized as revenue as of the period end. The majority of our deferred revenue balance consists of subscription and support revenue that is recognized ratably over the contractual service period. We monitor our deferred revenue balance because it represents a significant portion of revenue to be recognized in future periods.
- **Billings.** We define billings as total revenue plus the change in total deferred revenue, net of acquired deferred revenue, during the period. We consider billings to be a key metric used by management to manage our business. We believe billings provides investors with an important indicator of the health and visibility of our business because it includes subscription and support revenue, which is recognized ratably over the contractual service period, and product revenue, which is recognized at the time of hardware shipment or delivery of software license, provided that all other conditions for revenue recognition have been met. We consider billings to be a useful metric for management and investors, particularly if we continue to experience increased sales of subscriptions and strong renewal rates for subscription and support offerings, and as we monitor our near-term cash flows. While we believe that billings provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management, it is important to note that other companies, including companies in our industry, may not use billings, may calculate billings differently, may have different billing frequencies, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of billings as a comparative measure. We calculate billings in the following manner:

	Three Months Ended October 31,			
	2023		2022	
	(in millions)			
Billings:				
Total revenue	\$	1,878.1	\$	1,563.4
Add: change in total deferred revenue, net of acquired deferred revenue		146.4		185.6
Billings	\$	2,024.5	\$	1,749.0

- **Cash Flow Provided by Operating Activities.** We monitor cash flow provided by operating activities as a measure of our overall business performance. Our cash flow provided by operating activities is driven in large part by sales of our products and from up-front payments for subscription and support offerings. Monitoring cash flow provided by operating activities enables us to analyze our financial performance without the non-cash effects of certain items such as share-based compensation costs, depreciation and amortization, thereby allowing us to better understand and manage the cash needs of our business.
- **Free Cash Flow (non-GAAP).** We define free cash flow, a non-GAAP financial measure, as cash provided by operating activities less purchases of property, equipment, and other assets. We consider free cash flow to be a profitability and liquidity measure that provides useful information to management and investors about the amount of cash generated by the business after necessary capital expenditures. A limitation of the utility of free cash flow as a measure of our financial performance and liquidity is that it does not represent the total increase or decrease in our cash balance for the period. In addition, it is important to note that other companies, including companies in our industry, may not use free cash flow, may calculate free cash flow in a different manner than we do, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of free cash flow as a comparative measure. A reconciliation of free cash flow to cash flow provided by operating activities, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP, is provided below:

	Three Months Ended October 31,	
	2023	2022
	(in millions)	
Free cash flow (non-GAAP):		
Net cash provided by operating activities	\$ 1,526.0	\$ 1,236.7
Less: purchases of property, equipment, and other assets	36.8	39.6
Free cash flow (non-GAAP)	\$ 1,489.2	\$ 1,197.1
Net cash used in investing activities	\$ (129.0)	\$ (1,319.8)
Net cash provided by (used in) financing activities	\$ (41.8)	\$ 31.1

Results of Operations

The following table summarizes our results of operations for the periods presented and as a percentage of our total revenue for those periods based on our condensed consolidated statements of operations data. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Three Months Ended October 31,			
	2023		2022	
	Amount	% of Revenue	Amount	% of Revenue
(dollars in millions)				
Revenue:				
Product	\$ 341.1	18.2 %	\$ 330.0	21.1 %
Subscription and support	1,537.0	81.8 %	1,233.4	78.9 %
Total revenue	1,878.1	100.0 %	1,563.4	100.0 %
Cost of revenue:				
Product	77.4	4.1 %	120.1	7.7 %
Subscription and support	395.4	21.1 %	341.8	21.8 %
Total cost of revenue ⁽¹⁾	472.8	25.2 %	461.9	29.5 %
Total gross profit	1,405.3	74.8 %	1,101.5	70.5 %
Operating expenses:				
Research and development	409.5	21.8 %	371.8	23.8 %
Sales and marketing	660.5	35.1 %	615.0	39.3 %
General and administrative	120.1	6.4 %	99.5	6.4 %
Total operating expenses ⁽¹⁾	1,190.1	63.3 %	1,086.3	69.5 %
Operating income	215.2	11.5 %	15.2	1.0 %
Interest expense	(2.9)	(0.2 %)	(6.8)	(0.4)%
Other income, net	70.3	3.7 %	26.0	1.6 %
Income before income taxes	282.6	15.0 %	34.4	2.2 %
Provision for income taxes	88.4	4.7 %	14.4	0.9 %
Net income	\$ 194.2	10.3 %	\$ 20.0	1.3 %

⁽¹⁾ Includes share-based compensation as follows:

	Three Months Ended October 31,	
	2023	2022
	(in millions)	
Cost of product revenue	\$ 2.4	\$ 2.4
Cost of subscription and support revenue	30.6	28.8
Research and development	120.1	118.0
Sales and marketing	79.2	87.4
General and administrative	38.7	29.4
Total share-based compensation	\$ 271.0	\$ 266.0

REVENUE

Our revenue consists of product revenue and subscription and support revenue. Revenue is recognized upon transfer of control of the corresponding promised products and subscriptions and support to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those products and subscriptions and support. We expect our revenue to vary from quarter to quarter based on seasonal and cyclical factors.

PRODUCT REVENUE

Product revenue is derived from sales of our appliances, primarily our ML-Powered Next-Generation Firewall. Product revenue also includes revenue derived from software licenses of Panorama, SD-WAN, and the VM-Series. Our appliances and software licenses include a broad set of built-in networking and security features and functionalities. We recognize product revenue at the time of hardware shipment or delivery of software license.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Product	\$ 341.1	\$ 330.0	\$ 11.1	3.4 %

Product revenue for the three months ended October 31, 2023 increased compared to the same period in 2022 driven by increased software revenue primarily due to a new go-to-market strategy for certain Network Security offerings, and increased demand for our new generation of hardware products, partially offset by decreased revenue from our prior generation of hardware products.

SUBSCRIPTION AND SUPPORT REVENUE

Subscription and support revenue is derived primarily from sales of our subscription and support offerings. Our subscription and support contracts are typically one to five years. We recognize revenue from subscriptions and support over time as the services are performed. As a percentage of total revenue, we expect our subscription and support revenue to vary from quarter to quarter and increase over the long term as we introduce new subscriptions, renew existing subscription and support contracts, and expand our installed end-customer base.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Subscription	\$ 988.3	\$ 764.0	\$ 224.3	29.4 %
Support	548.7	469.4	79.3	16.9 %
Total subscription and support	\$ 1,537.0	\$ 1,233.4	\$ 303.6	24.6 %

Subscription and support revenue increased for the three months ended October 31, 2023 compared to the same period in 2022 due to increased demand for our subscription and support offerings from our end-customers. The mix between subscription revenue and support revenue will fluctuate over time, depending on the introduction of new subscription offerings, renewals of support services, and our ability to increase sales to new and existing end-customers.

REVENUE BY GEOGRAPHIC THEATER

	Three Months Ended October 31,		Change	
	2023	2022		
	Amount	Amount	Amount	%
	(dollars in millions)			
Americas	\$ 1,286.6	\$ 1,070.7	\$ 215.9	20.2 %
EMEA	364.9	307.9	57.0	18.5 %
APAC	226.6	184.8	41.8	22.6 %
Total revenue	\$ 1,878.1	\$ 1,563.4	\$ 314.7	20.1 %

Revenue from the Americas, Europe, the Middle East, and Africa (“EMEA”), and Asia Pacific and Japan (“APAC”), increased for the three months ended October 31, 2023 compared to the same period in 2022 as we continued to increase investment in our global sales force in order to support our growth and innovation. Our three geographic theaters had similar year-over-year revenue growth rates for the three months ended October 31, 2023 compared to the same period in 2022, with the Americas contributing the highest increase in revenue due to its larger scale.

COST OF REVENUE

Our cost of revenue consists of cost of product revenue and cost of subscription and support revenue.

COST OF PRODUCT REVENUE

Cost of product revenue primarily includes costs paid to our manufacturing partners for procuring components and manufacturing our products. Our cost of product revenue also includes personnel costs, which consist of salaries, benefits, bonuses, share-based compensation, and travel associated with our operations organization, amortization of intellectual property licenses, product testing costs, shipping and tariff costs, and shared costs. Shared costs consist of certain facilities, depreciation, benefits, recruiting, and information technology costs that we allocate based on headcount. We expect our cost of product revenue to fluctuate with our revenue from hardware products.

	Three Months Ended October 31,		Change	
	2023	2022		
	Amount	Amount	Amount	%
	(dollars in millions)			
Cost of product revenue	\$ 77.4	\$ 120.1	\$ (42.7)	(35.6)%

Cost of product revenue decreased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to lower costs largely driven by an easing of supply chain challenges and decreased demand for our prior generation of hardware products.

COST OF SUBSCRIPTION AND SUPPORT REVENUE

Cost of subscription and support revenue includes personnel costs for our global customer support and technical operations organizations, customer support and repair costs, third-party professional services costs, data center and cloud hosting service costs, amortization of acquired intangible assets and capitalized software development costs, and shared costs. We expect our cost of subscription and support revenue to increase as our installed end-customer base grows and adoption of our cloud-based subscription offerings increases.

	Three Months Ended October 31,				
	2023		2022		Change
	Amount	Amount	Amount	%	
(dollars in millions)					
Cost of subscription and support revenue	\$ 395.4	\$ 341.8	\$ 53.6	15.7 %	

Cost of subscription and support revenue increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to increased costs to support the growth of our subscription and support offerings. Cloud hosting service costs, which support our cloud-based subscription offerings, increased \$26.2 million for the three months ended October 31, 2023 compared to the same period in 2022. Personnel costs grew \$23.0 million for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to headcount growth.

GROSS MARGIN

Gross margin has been and will continue to be affected by a variety of factors, including the introduction of new products, manufacturing costs, the average sales price of our products, cloud hosting service costs, personnel costs, the mix of products sold, and the mix of revenue between product and subscription and support offerings. Our virtual and higher-end firewall products generally have higher gross margins than our lower-end firewall products within each product series. We expect our gross margins to vary over time depending on the factors described above.

	Three Months Ended October 31,			
	2023		2022	
	Amount	Gross Margin	Amount	Gross Margin
(dollars in millions)				
Product	\$ 263.7	77.3 %	\$ 209.9	63.6 %
Subscription and support	1,141.6	74.3 %	891.6	72.3 %
Total gross profit	\$ 1,405.3	74.8 %	\$ 1,101.5	70.5 %

Product gross margin increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to lower costs largely driven by an easing of supply chain challenges and increased software revenue.

Subscription and support gross margin increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to our growth in subscription and support revenue, which outpaced the subscription and support costs.

OPERATING EXPENSES

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, share-based compensation, travel and entertainment, and with regard to sales and marketing expense, sales commissions. Our operating expenses also include shared costs, which consist of certain facilities, depreciation, benefits, recruiting, and information technology costs that we allocate based on headcount to each department. We expect operating expenses generally to increase in absolute dollars and decrease over the long term as a percentage of revenue as we continue to scale our business. As of October 31, 2023, we expect to recognize approximately \$1.9 billion of share-based compensation expense over a weighted-average period of approximately 2.7 years, excluding additional share-based compensation expense related to any future grants of share-based awards. Share-based compensation expense is generally recognized on a straight-line basis over the requisite service periods of the awards.

RESEARCH AND DEVELOPMENT

Research and development expense consists primarily of personnel costs. Research and development expense also includes prototype-related expenses and shared costs. We expect research and development expense to increase in absolute dollars as we continue to invest in our future products and services, although our research and development expense may fluctuate as a percentage of total revenue.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Research and development	\$ 409.5	\$ 371.8	\$ 37.7	10.1 %

Research and development expense increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to increased personnel costs, which grew \$27.4 million, largely due to headcount growth.

SALES AND MARKETING

Sales and marketing expense consists primarily of personnel costs, including commission expense. Sales and marketing expense also includes costs for market development programs, promotional and other marketing costs, professional services, and shared costs. We continue to strategically invest in headcount and have grown our sales presence. We expect sales and marketing expense to continue to increase in absolute dollars as we increase the size of our sales and marketing organizations to grow our customer base, increase touch points with end-customers, and expand our global presence, although our sales and marketing expense may fluctuate as a percentage of total revenue.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Sales and marketing	\$ 660.5	\$ 615.0	\$ 45.5	7.4 %

Sales and marketing expense increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to increased personnel costs, which grew \$21.8 million, largely due to headcount growth. The increase in sales and marketing expense was further driven by increased costs associated with sales and marketing events and go-to-market initiatives.

GENERAL AND ADMINISTRATIVE

General and administrative expense consists primarily of personnel costs and shared costs for our executive, finance, human resources, information technology, and legal organizations, and professional services costs, which consist primarily of legal, auditing, accounting, and other consulting costs. We expect general and administrative expense to increase in absolute dollars over time as we increase the size of our general and administrative organizations and incur additional costs to support our business growth, although our general and administrative expense may fluctuate as a percentage of total revenue.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
General and administrative	\$ 120.1	\$ 99.5	\$ 20.6	20.7 %

General and administrative expense increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to increased personnel costs, which grew \$12.8 million, largely due to increased share-based compensation and headcount growth. The increase in general and administrative expense was further driven by increased professional services expense during the three months ended October 31, 2023.

INTEREST EXPENSE

Interest expense primarily consists of interest expense related to our 0.75% Convertible Senior Notes due 2023 (the “2023 Notes”) and our 0.375% Convertible Senior Notes due 2025 (the “2025 Notes,” and together with “2023 Notes,” the “Notes”).

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Interest expense	\$ 2.9	\$ 6.8	\$ (3.9)	(57.4)%

Interest expense decreased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to conversions of the 2023 Notes prior to or upon maturity in July 2023. Refer to Note 8. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on the Notes.

OTHER INCOME, NET

Other income, net includes interest income earned on our cash, cash equivalents, and investments, and gains and losses from foreign currency remeasurement and foreign currency transactions.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Other income, net	\$ 70.3	\$ 26.0	\$ 44.3	170.4 %

Other income, net increased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to higher interest income as a result of higher interest rates and higher average cash, cash equivalent, and investment balances for the three months ended October 31, 2023 compared to 2022.

PROVISION FOR INCOME TAXES

Provision for income taxes consists primarily of U.S. taxes driven by capitalization of research and development expenditures, foreign income taxes, and withholding taxes. We maintain a full valuation allowance for domestic and certain foreign deferred tax assets, including net operating loss carryforwards and certain domestic tax credits. Our valuation allowance has caused, and may continue to cause, disproportionate relationships between our overall effective tax rate and other jurisdictional measures. We regularly evaluate the need for a valuation allowance. Due to recent profitability, a reversal of our valuation allowance in certain jurisdictions in the near future is reasonably possible.

	Three Months Ended October 31,			
	2023	2022	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Provision for income taxes	\$ 88.4	\$ 14.4	\$ 74.0	513.9 %
Effective tax rate	31.3 %	41.9 %		

Our provision for income taxes for the three months ended October 31, 2023 was primarily due to U.S. federal and state income taxes, withholding taxes, and foreign income taxes. Our effective tax rate decreased for the three months ended October 31, 2023 compared to the same period in 2022 primarily due to higher tax benefits from our share-based compensation. Refer to Note 12. Income Taxes in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information.

Liquidity and Capital Resources

	October 31, 2023	July 31, 2023
	(in millions)	
Working capital ⁽¹⁾	\$ (1,035.8)	\$ (1,689.5)
Cash, cash equivalents, and investments:		
Cash and cash equivalents	\$ 2,491.4	\$ 1,135.3
Investments	4,391.3	4,302.6
Total cash, cash equivalents, and investments	\$ 6,882.7	\$ 5,437.9

⁽¹⁾ Current liabilities included net carrying amounts of convertible senior notes of \$1.9 billion and \$2.0 billion as of October 31, 2023 and July 31, 2023, respectively. Refer to Note 8 Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for information on the Notes.

As of October 31, 2023, our total cash, cash equivalents, and investments of \$6.9 billion were held for general corporate purposes. As of October 31, 2023, we had no unremitted earnings when evaluating our outside basis difference relating to our U.S. investment in foreign subsidiaries. However, there could be local withholding taxes due to various foreign countries if certain lower tier earnings are distributed. Withholding taxes that would be payable upon remittance of these lower tier earnings are not expected to be material.

Beginning in fiscal 2023, we were required to capitalize and amortize R&D expenses as required by the Tax Cuts and Jobs Act. As a result of this change, we expect to pay significantly more cash taxes in the future, beginning in fiscal 2024.

DEBT

In June 2020, we issued the 2025 Notes with an aggregate principal amount of \$2.0 billion. The 2025 Notes mature on June 1, 2025; however, under certain circumstances, holders may surrender their 2025 Notes for conversion prior to the maturity date. Upon conversion of the 2025 Notes, we will pay cash equal to the aggregate principal amount of the 2025 Notes to be converted, and, at our election, we will pay or deliver cash and/or shares of our common stock for the amount of our conversion obligation in excess of the aggregate principal amount of the 2025 Notes being converted. During the three months ended October 31, 2023, holders of the 2025 Notes converted \$46.0 million in aggregate principal amount of the 2025 Notes, which we repaid in cash. We also issued 0.3 million shares of our common stock to the holders of the 2025 Notes for the conversion value in excess of the principal amount of the 2025 Notes converted, which were fully offset by shares we received from the corresponding exercise of the associated note hedges.

The sale price condition for the 2025 Notes was met during the fiscal quarter ended October 31, 2023, and as a result, holders may convert their 2025 Notes during the fiscal quarter ending January 31, 2024. If all of the holders convert their 2025 Notes during this period, we would be obligated to settle the \$2.0 billion principal amount of the 2025 Notes in cash. We believe that our cash provided by operating activities, our existing cash, cash equivalents, and investments, and existing sources of and access to financing will be sufficient to meet our anticipated cash needs should the holders choose to convert their 2025 Notes during the fiscal quarter ending January 31, 2024 or hold the 2025 Notes until maturity on June 1, 2025. As of October 31, 2023, substantially all of our 2025 Notes remained outstanding. Refer to Note 8. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on the Notes.

In April 2023, we entered into a credit agreement (the "Credit Agreement") that provides for a \$400.0 million unsecured revolving credit facility (the "Credit Facility"), with an option to increase the amount of the Credit Facility by up to an additional \$350.0 million, subject to certain conditions. The interest rates and commitment fees are also subject to upward and downward adjustments based on our progress towards the achievement of certain sustainability goals related to greenhouse gas emissions. As of October 31, 2023, there were no amounts outstanding, and we were in compliance with all covenants under the Credit Agreement. Refer to Note 8. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on the Credit Agreement.

CAPITAL RETURN

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program. In December 2020, August 2021, and August 2022, our board of directors authorized additional \$700.0 million, \$676.1 million, and \$915.0 million increases to this share repurchase program, respectively, bringing the total authorization under this share repurchase program to \$3.3 billion. Repurchases will be funded from available working capital and may be made at management's discretion from time to time. As of October 31, 2023, \$683.3 million remained available for future share repurchases under this repurchase program. On November 16, 2023, our board of directors authorized a \$316.7 million increase to our share repurchase program, bringing the total remaining authorization for future share repurchases to \$1.0 billion. The repurchase authorization will expire on December 31, 2024, and may be suspended or discontinued at any time without prior notice. Refer to Note 10. Stockholders' Equity and Note 15. Subsequent Events in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on this repurchase program.

LEASES AND OTHER MATERIAL CASH REQUIREMENTS

We have entered into various non-cancelable operating leases primarily for our facilities with original lease periods expiring through the fiscal year ending July 31, 2033, with the most significant leases relating to our corporate headquarters in Santa Clara, California. As of October 31, 2023, we have total operating lease obligations of \$336.8 million recorded on our condensed consolidated balance sheet.

As of October 31, 2023, our commitments to purchase products, components, cloud and other services totaled \$1.7 billion. Refer to Note 9. Commitments and Contingencies in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on these commitments.

CASH FLOWS

The following table summarizes our cash flows for the three months ended October 31, 2023 and 2022:

	Three Months Ended October 31,	
	2023	2022
	(in millions)	
Net cash provided by operating activities	\$ 1,526.0	\$ 1,236.7
Net cash used in investing activities	(129.0)	(1,319.8)
Net cash provided by (used in) financing activities	(41.8)	31.1
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ 1,355.2	\$ (52.0)

Cash from operations could be affected by various risks and uncertainties detailed in Part II, Item 1A "Risk Factors" in this Quarterly Report on Form 10-Q. We believe that our cash flow from operations with existing cash and cash equivalents will be sufficient to meet our anticipated cash needs for at least the next 12 months and thereafter for the foreseeable future. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced products and subscription and support offerings, the costs to acquire or invest in complementary businesses and technologies, the costs to ensure access to adequate manufacturing capacity, the investments in our infrastructure to support the adoption of our cloud-based subscription offerings, the repayment obligations associated with our Notes, the continuing market acceptance of our products and subscription and support offerings and macroeconomic events. In addition, from time to time, we may incur additional tax liability in connection with certain corporate structuring decisions.

We may also choose to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results, and financial condition may be adversely affected.

OPERATING ACTIVITIES

Our operating activities have consisted of net income adjusted for certain non-cash items and changes in assets and liabilities. Our largest source of cash provided by our operations is receipts from our billings.

Cash provided by operating activities during the three months ended October 31, 2023 was \$1.5 billion, an increase of \$289.3 million compared to the same period in 2022. The increase was primarily due to growth of our business as reflected by increases in collections during the three months ended October 31, 2023, partially offset by higher cash expenditure to support our business growth.

INVESTING ACTIVITIES

Our investing activities have consisted of capital expenditures, net investment purchases, sales, and maturities, and business acquisitions. We expect to continue such activities as our business grows.

Cash used in investing activities during the three months ended October 31, 2023 was \$129.0 million, a decrease of \$1.2 billion compared to the same period in 2022. The decrease was primarily due to a decrease in purchases of investments during the three months ended October 31, 2023.

FINANCING ACTIVITIES

Our financing activities have consisted of cash used to repurchase shares of our common stock, proceeds from sales of shares through employee equity incentive plans, and payments for tax withholding obligations of certain employees related to the net share settlement of equity awards.

Cash used in financing activities during the three months ended October 31, 2023 was \$41.8 million, a change of \$72.9 million compared to cash provided by financing activities of \$31.1 million during the same period in 2022. The change was primarily due to early repayments of our 2025 Notes and repurchases of our common stock during the three months ended October 31, 2023.

Critical Accounting Estimates

Our condensed consolidated financial statements have been prepared in accordance with U.S. GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results could differ materially from those estimates due to risks and uncertainties, including uncertainty in the current economic environment. To the extent that there are material differences between these estimates and our actual results, our future consolidated financial statements will be affected.

We believe the critical accounting estimates discussed under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended July 31, 2023 reflect our more significant estimates, assumptions, and judgments that have the most significant impact on our condensed consolidated financial statements. There have been no significant changes to our critical accounting estimates as filed in such report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Except for the item below, our assessment of our exposures to market risk has not changed materially from the disclosure set forth in Part II, Item 7A of our Annual Report on Form 10-K for the fiscal year ended July 31, 2023.

Interest Rate Risk

The primary objectives of our investment activities are to preserve principal, provide liquidity, and maximize income without significantly increasing risk. Most of the securities we invest in are subject to interest rate risk. To minimize this risk, we maintain a diversified portfolio of cash, cash equivalents, and investments, consisting only of investment-grade securities. To assess the interest rate risk, we performed a sensitivity analysis to determine the impact a change in interest rates would have on the value of the investment portfolio. Based on investment positions as of October 31, 2023, a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$62.5 million decline in the fair market value of the portfolio. Such losses would only be realized if we sold the investments prior to maturity. Conversely, a hypothetical 100 basis point decrease in interest rates would lead to a \$62.5 million increase in the fair market value of the portfolio.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of the end of the period covered by this report. Based on our evaluation, our chief executive officer and chief financial officer concluded that, as of October 31, 2023, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the fiscal quarter ended October 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

Part II

Item 1. Legal Proceedings

The information set forth under the "Litigation" subheading in Note 9. Commitments and Contingencies in Part I, Item 1 of this Quarterly Report on Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors

Our operations and financial results are subject to various risks and uncertainties including those described below. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the following risks or others not specified below materialize, our business, financial condition, and operating results could be materially adversely affected, and the market price of our common stock could decline. In addition, the impacts of any worsening of the economic environment may exacerbate the risks described below, any of which could have a material impact on us.

Risk Factor Summary

Our business is subject to numerous risks and uncertainties. These risks include, but are not limited to, the following:

- Our operating results may be adversely affected by unfavorable economic and market conditions and the uncertain geopolitical environment.
- Our business and operations have experienced growth in recent periods, and if we do not effectively manage any future growth or are unable to improve our systems, processes, and controls, our operating results could be adversely affected.
- Our revenue growth rate in recent periods may not be indicative of our future performance, and we may not be able to maintain profitability, which could cause our business, financial condition, and operating results to suffer.
- Our operating results may vary significantly from period to period, which makes our results difficult to predict and could cause our results to fall short of expectations, and such results may not be indicative of future performance.
- Seasonality may cause fluctuations in our revenue.
- If we are unable to sell new and additional product, subscription, and support offerings to our end-customers, especially to large enterprise customers, our future revenue and operating results will be harmed.
- We rely on revenue from subscription and support offerings, and because we recognize revenue from subscription and support over the term of the relevant service period, downturns or upturns in sales or renewals of these subscription and support offerings are not immediately reflected in full in our operating results.
- The sales prices of our products, subscriptions, and support offerings may decrease, which may reduce our revenue and gross profits and adversely impact our financial results.
- We rely on our channel partners to sell substantially all of our products, including subscriptions and support, and if these channel partners fail to perform, our ability to sell and distribute our products and subscriptions will be limited and our operating results will be harmed.
- We are exposed to the credit and liquidity risk of our customers, and to credit exposure in weakened markets, which could result in material losses.
- A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.
- We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.
- We may acquire other businesses, which could subject us to adverse claims or liabilities, require significant management attention, disrupt our business, adversely affect our operating results, may not result in the expected benefits of such acquisitions, and may dilute stockholder value.
- If we do not accurately predict, prepare for, and respond promptly to rapidly evolving technological and market developments and successfully manage product and subscription introductions and transitions to meet changing end-customer needs in the enterprise security industry, our competitive position and prospects will be harmed.

- Issues in the development and deployment of Artificial Intelligence (“AI”) may result in reputational harm and legal liability and could adversely affect our results of operations.
- A network or data security incident may allow unauthorized access to our network or data, harm our reputation, create additional liability, and adversely impact our financial results.
- Defects, errors, or vulnerabilities in our products, subscriptions, or support offerings, the failure of our products or subscriptions to block a virus or prevent a security breach or incident, misuse of our products, or risks of product liability claims could harm our reputation and adversely impact our operating results.
- Our ability to sell our products and subscriptions is dependent on the quality of our technical support services and those of our channel partners, and the failure to offer high-quality technical support services could have a material adverse effect on our end-customers’ satisfaction with our products and subscriptions, our sales, and our operating results.
- Claims by others that we infringe their intellectual property rights could harm our business.
- Our proprietary rights may be difficult to enforce or protect, which could enable others to copy or use aspects of our products or subscriptions without compensating us.
- Our use of open source software in our products and subscriptions could negatively affect our ability to sell our products and subscriptions and subject us to possible litigation.
- We license technology from third parties, and our inability to maintain those licenses could harm our business.
- Because we depend on manufacturing partners to build and ship our hardware products, we are susceptible to manufacturing and logistics delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and end-customers.
- Managing the supply of our hardware products and product components is complex. Insufficient supply and inventory would result in lost sales opportunities or delayed revenue, while excess inventory would harm our gross margins.
- Because some of the key components in our hardware products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which, in certain cases, have disrupted or delayed our scheduled product deliveries to our end-customers, increased our costs and may result in the loss of sales and end-customers.
- If we are unable to attract, retain, and motivate our key technical, sales, and management personnel, our business could suffer.
- We generate a significant amount of revenue from sales to distributors, resellers, and end-customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.
- We are exposed to fluctuations in foreign currency exchange rates, which could negatively affect our financial condition and operating results.
- We face risks associated with having operations and employees located in Israel.
- We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.
- Our actual or perceived failure to adequately protect personal data could have a material adverse effect on our business.
- We may have exposure to greater than anticipated tax liabilities.
- If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.
- We are obligated to maintain proper and effective internal control over financial reporting. We may not complete our analysis of our internal control over financial reporting in a timely manner, or our internal control may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.
- Our reputation and/or business could be negatively impacted by environmental, social, and governance (“ESG”) matters and/or our reporting of such matters.
- Failure to comply with governmental laws and regulations could harm our business.
- We may not have the ability to raise the funds necessary to settle conversions of our Notes, repurchase our Notes upon a fundamental change, or repay our Notes in cash at their maturity, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of our Notes.
- We may still incur substantially more debt or take other actions that would diminish our ability to make payments on our Notes when due.
- The market price of our common stock historically has been volatile, and the value of an investment in our common stock could decline.
- The convertible note hedge and warrant transactions may affect the value of our common stock.

Risks Related to Global Economic and Geopolitical Conditions

Our operating results may be adversely affected by unfavorable economic and market conditions and the uncertain geopolitical environment.

We operate globally, and as a result, our business and revenues are impacted by global economic and geopolitical conditions. The instability in the global credit markets, inflation, changes in public policies such as domestic and international regulations, taxes, any increases in interest rates, fluctuations in foreign currency exchange rates, or international trade agreements, international trade disputes, geopolitical turmoil, and other disruptions to global and regional economies and markets continue to add uncertainty to global economic conditions. Military actions or armed conflict, including the hostilities in Israel, Russia's invasion of Ukraine and any related political or economic responses and counter-responses, and uncertainty about, or changes in, government and trade relationships, policies, and treaties could also lead to worsening economic and market conditions and geopolitical environment. In response to Russia's invasion of Ukraine, the United States, along with the European Union, has imposed restrictive sanctions on Russia, Russian entities, and Russian citizens ("Sanctions on Russia"). We are subject to these governmental sanctions and export controls, which may subject us to liability if we are not in full compliance with applicable laws. Any continued or further uncertainty, weakness or deterioration in economic and market conditions or the geopolitical environment could have a material and adverse impact on our business, financial condition, and results of operations, including reductions in sales of our products and subscriptions, longer sales cycles, reductions in subscription or contract duration and value, slower adoption of new technologies, alterations in the spending patterns or priorities of current and prospective customers (including delaying purchasing decisions), increased costs for the chips and components to manufacture our products, and increased price competition.

Risks Related to Our Business

RISKS RELATED TO OUR GROWTH

Our business and operations have experienced growth in recent periods, and if we do not effectively manage any future growth or are unable to improve our systems, processes, and controls, our operating results could be adversely affected.

We have experienced growth and increased demand for our products and subscriptions over the last few years. As a result, our employee headcount has increased, and we expect it to continue to grow over the next year. For example, from the end of fiscal 2023 to the end of the first quarter of fiscal 2024, our headcount increased from 13,948 to 14,182 employees. In addition, as we have grown, the number of end-customers has also increased, and we have managed more complex deployments of our products and subscriptions with larger end-customers. The growth and expansion of our business and product, subscription, and support offerings places a significant strain on our management, operational, and financial resources. To manage any future growth effectively, we must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems and controls, and our ability to manage headcount, capital, and processes in an efficient manner.

We may not be able to successfully implement, scale, or manage improvements to our systems, processes, and controls in an efficient or timely manner, which could result in material disruptions of our operations and business. In addition, our existing systems, processes, and controls may not prevent or detect all errors, omissions, or fraud. We may also experience difficulties in managing improvements to our systems, processes, and controls, or in connection with third-party software licensed to help us with such improvements. Any future growth would add complexity to our organization and require effective coordination throughout our organization. Failure to manage any future growth effectively could result in increased costs, disrupt our existing end-customer relationships, reduce demand for or limit us to smaller deployments of our products, or materially harm our business performance and operating results.

Our revenue growth rate in recent periods may not be indicative of our future performance, and we may not be able to maintain profitability, which could cause our business, financial condition, and operating results to suffer.

We have experienced revenue growth rates of 20.1% and 25.3% in three months ended October 31, 2023 and 2022, respectively. Our revenue for any quarterly or annual period should not be relied upon as an indication of our future revenue or revenue growth for any future period. If we are unable to maintain consistent or increasing revenue or revenue growth, the market price of our common stock could be volatile, and it may be difficult for us to maintain profitability or maintain or increase cash flow on a consistent basis.

In addition, we have incurred losses in fiscal years prior to fiscal 2023 and, as a result, we had an accumulated deficit of \$1.0 billion as of October 31, 2023. We anticipate that our operating expenses will continue to increase in the foreseeable future as we continue to grow our business. Our growth efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenues sufficiently, or at all, to offset increasing expenses. Revenue growth may slow or revenue may decline for a number of possible reasons, including slowing demand for our products or subscriptions, increasing competition, a decrease in the growth of, or a demand shift in, our overall market, or a failure to capitalize on growth opportunities. We have also entered into a substantial amount of capital commitments for operating lease obligations and other purchase commitments. Any failure to increase our revenue as we grow our business could prevent us from maintaining profitability or maintaining or increasing cash flow on a consistent basis, or satisfying our capital commitments. If we are unable to navigate these challenges as we encounter them, our business, financial condition, and operating results may suffer.

Our operating results may vary significantly from period to period, which makes our results difficult to predict and could cause our results to fall short of expectations, and such results may not be indicative of future performance.

Our operating results have fluctuated in the past, and will likely continue to fluctuate in the future, as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including those factors described in this Risk Factor section. For example, we have historically received a substantial portion of sales orders and generated a substantial portion of revenue during the last few weeks of each fiscal quarter. If expected revenue at the end of any fiscal quarter is delayed for any reason, including the failure of anticipated purchase orders to materialize (particularly for large enterprise end-customers with lengthy sales cycles), our logistics partners' inability to ship products prior to fiscal quarter-end to fulfill purchase orders received near the end of a fiscal quarter, our failure to manage inventory to meet demand, any failure of our systems related to order review and processing, or any delays in shipments based on trade compliance requirements (including new compliance requirements imposed by new or renegotiated trade agreements), our revenue could fall below our expectations and the estimates of analysts for that quarter. Due to these fluctuations, comparing our revenue, margins, or other operating results on a period-to-period basis may not be meaningful, and our past results should not be relied on as an indication of our future performance.

This variability and unpredictability could also result in our failure to meet our revenue, margin, or other operating result expectations contained in any forward-looking statements (including financial or business expectations we have provided) or those of securities analysts or investors for a particular period. If we fail to meet or exceed such expectations for these, or any other, reasons, the market price of our common stock could fall substantially, and we could face costly lawsuits, including securities class action suits.

Seasonality may cause fluctuations in our revenue.

We believe there are significant seasonal factors that may cause our second and fourth fiscal quarters to record greater revenue sequentially than our first and third fiscal quarters. We believe that this seasonality results from a number of factors, including:

- end-customers with a December 31 fiscal year-end choosing to spend remaining unused portions of their discretionary budgets before their fiscal year-end, which potentially results in a positive impact on our revenue in our second fiscal quarter;
- our sales compensation plans, which are typically structured around annual quotas and commission rate accelerators, which potentially results in a positive impact on our revenue in our fourth fiscal quarter; and
- the timing of end-customer budget planning at the beginning of the calendar year, which can result in a delay in spending at the beginning of the calendar year, potentially resulting in a negative impact on our revenue in our third fiscal quarter.

As we continue to grow, seasonal or cyclical variations in our operations may become more pronounced, and our business, operating results, and financial position may be adversely affected.

RISKS RELATED TO OUR PRODUCTS AND TECHNOLOGY

If we are unable to sell new and additional product, subscription, and support offerings to our end-customers, especially to large enterprise customers, our future revenue and operating results will be harmed.

Our future success depends, in part, on our ability to expand the deployment of our portfolio with existing end-customers, especially large enterprise customers, and create demand for our new offerings. The rate at which our end-customers purchase additional products, subscriptions, and support depends on a number of factors, including the perceived need for additional security products, including subscription and support offerings, as well as general economic conditions. If our efforts to sell additional products and subscriptions to our end-customers are not successful, our revenues may grow more slowly than expected or decline.

Sales to large enterprise end-customers, which is part of our growth strategy, involve risks that may not be present, or that are present to a lesser extent, with sales to smaller entities, such as (a) longer sales cycles and the associated risk that substantial time and resources may be spent on a potential end-customer that elects not to purchase our products, subscriptions, and support, and (b) increased purchasing power and leverage held by large end-customers in negotiating contractual arrangements. Deployments for large enterprise end-customers are also more complex, require greater product functionality, scalability, and a broader range of services, and are more time-consuming. All of these factors add further risk to business conducted with these end-customers. Failure to realize sales from large enterprise end-customers could materially and adversely affect our business, operating results, and financial condition.

We rely on revenue from subscription and support offerings, and because we recognize revenue from subscription and support over the term of the relevant service period, downturns or upturns in sales or renewals of these subscription and support offerings are not immediately reflected in full in our operating results.

Subscription and support revenue accounts for a significant portion of our revenue, comprising 81.8% of total revenue in the three months ended October 31, 2023 and 78.9% of total revenue in the three months ended October 31, 2022. Sales and renewals of subscription and support contracts may decline and fluctuate as a result of a number of factors, including end-customers' level of satisfaction with our products and subscriptions, the frequency and severity of subscription outages, our product uptime or latency, the prices of our products and subscriptions, and reductions in our end-customers' spending levels. Existing end-customers have no contractual obligation to, and may not, renew their subscription and support contracts after the completion of their initial contract period. Additionally, our end-customers may renew their subscription and support agreements for shorter contract lengths or on other terms that are less economically beneficial to us. If our sales of new or renewal subscription and support contracts decline, our total revenue and revenue growth rate may decline, and our business will suffer. In addition, because we recognize subscription and support revenue over the term of the relevant service period, which is typically one to five years, a decline in subscription or support contracts in any one fiscal quarter will not be fully or immediately reflected in revenue in that fiscal quarter but will negatively affect our revenue in future fiscal quarters.

The sales prices of our products, subscriptions, and support offerings may decrease, which may reduce our revenue and gross profits and adversely impact our financial results.

The sales prices for our products, subscriptions, and support offerings may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of products, subscriptions, and support offerings, anticipation of the introduction of new products, subscriptions, or support offerings, or promotional programs or pricing pressures. Furthermore, we anticipate that the sales prices and gross profits for our products could decrease over product life cycles. Declining sales prices could adversely affect our revenue, gross profits, and profitability.

We rely on our channel partners to sell substantially all of our products, including subscriptions and support, and if these channel partners fail to perform, our ability to sell and distribute our products and subscriptions will be limited and our operating results will be harmed.

Substantially all of our revenue is generated by sales through our channel partners, including distributors and resellers. For the three months ended October 31, 2023, three distributors individually represented 10% or more of our total revenue and in the aggregate represented 46.0% of our total revenue. As of October 31, 2023, two distributors individually represented 10% or more of our gross accounts receivable and in the aggregate represented 31.5% of our gross accounts receivable.

We provide our channel partners with specific training and programs to assist them in selling our products, including subscriptions and support offerings, but there can be no assurance that these steps will be utilized or effective. In addition, our channel partners may be unsuccessful in marketing, selling, and supporting our products and subscriptions. We may not be able to incentivize these channel partners to sell our products and subscriptions to end-customers and, in particular, to large enterprises. These channel partners may also have incentives to promote our competitors' products and may devote more resources to the marketing, sales, and support of competitive products. Our agreements with our channel partners may generally be terminated for any reason by either party with advance notice prior to each annual renewal date. We cannot be certain that we will retain these channel partners or that we will be able to secure additional or replacement channel partners. In addition, any new channel partner requires extensive training and may take several months or more to achieve productivity. Our channel partner sales structure could subject us to lawsuits, potential liability, and reputational harm if, for example, any of our channel partners misrepresent the functionality of our products or subscriptions to end-customers or violate laws or our corporate policies. If we fail to effectively manage our sales channels or channel partners, our ability to sell our products and subscriptions and operating results will be harmed.

We are exposed to the credit and liquidity risk of our customers, and to credit exposure in weakened markets, which could result in material losses.

Most of our sales are made on an open credit basis. Beyond our open credit arrangements, we have also experienced demands for customer financing and deferred payments due to, among other things, macro-economic conditions. To respond to this demand, our customer financing activities have increased and will likely continue to increase in the future. Increases in deferred payments result in payments being made over time, negatively impacting our short-term cash flows, and subject us to risk of non-payment by our customers, including as a result of insolvency. We monitor customer payment capability in granting such financing arrangements, seek to limit the amounts to what we believe customers can pay and maintain reserves we believe are adequate to cover exposure for doubtful accounts to mitigate credit risks of these customers. However, there can be no assurance that these programs will be effective in reducing our credit risks. To the degree that turmoil in the credit markets makes it more difficult for some customers to obtain financing, those customers' ability to pay could be adversely impacted, which in turn could have a material adverse impact on our business, operating results, and financial condition.

Our exposure to the credit risks relating to the financing activities described above may increase if our customers are adversely affected by a global economic downturn or periods of economic uncertainty. If we are unable to adequately control these risks, our business, operating results, and financial condition could be harmed. In addition, in the past, we have experienced non-material losses due to bankruptcies among customers. If these losses increase due to global economic conditions, they could harm our business and financial condition.

A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.

Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive, and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. The substantial majority of our sales to date to government entities have been made indirectly through our channel partners. Government certification requirements for products and subscriptions like ours may change, thereby restricting our ability to sell into the federal government sector until we have attained the revised certification. If our products and subscriptions are late in achieving or fail to achieve compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, we may be disqualified from selling our products, subscriptions, and support offerings to such governmental entity, or be at a competitive disadvantage, which would harm our business, operating results, and financial condition. Government demand and payment for our products, subscriptions, and support offerings may be impacted by government shutdowns, public sector budgetary cycles, contracting requirements, and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our products, subscriptions, and support offerings. Government entities may have statutory, contractual, or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely impact our future operating results. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our products, subscriptions, and support offerings, a reduction of revenue, or fines or civil or criminal liability if the audit uncovers improper or illegal activities, which could adversely impact our operating results in a material way. Additionally, the U.S. government may require certain of the products that it purchases to be manufactured in the United States and other relatively high-cost manufacturing locations, and we may not manufacture all products in locations that meet such requirements, affecting our ability to sell these products, subscriptions, and support offerings to the U.S. government.

We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The industry for enterprise security products is intensely competitive, and we expect competition to increase in the future from established competitors and new market entrants. Our main competitors fall into four categories:

- large companies that incorporate security features in their products, such as Cisco, Microsoft, or those that have acquired, or may acquire, security vendors and have the technical and financial resources to bring competitive solutions to the market;
- independent security vendors, such as Check Point, Fortinet, CrowdStrike, and Zscaler, that offer a mix of security products;
- startups and point-product vendors that offer independent or emerging solutions across various areas of security; and
- public cloud vendors and startups that offer solutions for cloud security (private, public, and hybrid cloud).

Many of our competitors have greater financial, technical, marketing, sales, and other resources, greater name recognition, longer operating histories, and a larger base of customers than we do. They may be able to devote greater resources to the promotion and sale of products and services than we can, and they may offer lower pricing than we do. Further, they may have greater resources for research and development of new technologies, the provision of customer support, and the pursuit of acquisitions. They may also have larger and more mature intellectual property portfolios, and broader and more diverse product and service offerings, which allow them to leverage their relationships based on other products or incorporate functionality into existing products to gain business in a manner that discourages users from purchasing our products and subscriptions, including incorporating cybersecurity features into their existing products or services and product bundling, selling at zero or negative margins, and offering concessions or a closed technology offering. Some competitors may have broader distribution and established relationships with distribution partners and end-customers. Other competitors specialize in providing protection from a single type of security threat, which may allow them to deliver these specialized security products to the market more quickly than we can.

We also face competition from companies that have entrenched legacy offerings at end-user customers. End-user customers have also often invested substantial personnel and financial resources to design and operate their networks and have established deep relationships with other providers of networking and security products. As a result, these organizations may prefer to purchase from their existing suppliers rather than add or switch to a new supplier such as us. In addition, as our customers refresh the security products bought in prior years, they may seek to consolidate vendors, which may result in current customers choosing to purchase products from our competitors. Due to budget constraints or economic downturns, organizations may add solutions to their existing network security infrastructure rather than replacing it with our products and subscriptions.

Conditions in our market could change rapidly and significantly as a result of technological advancements, partnering or acquisitions by our competitors, or continuing market consolidation. Our competitors and potential competitors may be able to develop new or disruptive technologies, products, or services, and leverage new business models that are equal or superior to ours, achieve greater market acceptance of their products and services, disrupt our markets, and increase sales by utilizing different distribution channels than we do. In addition, new and enhanced technologies, including AI and machine learning, continue to increase our competition. To compete successfully, we must accurately anticipate technology developments and deliver innovative, relevant, and useful products, services, and technologies in a timely manner. Some of our competitors have made or could make acquisitions of businesses that may allow them to offer more directly competitive and comprehensive solutions than they had previously offered and adapt more quickly to new technologies and end-customer needs. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources.

These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins, and loss of market share. If we are unable to compete successfully, or if competing successfully requires us to take aggressive pricing or other actions, our business, financial condition, and results of operations would be adversely affected.

We may acquire other businesses, which could subject us to adverse claims or liabilities, require significant management attention, disrupt our business, adversely affect our operating results, may not result in the expected benefits of such acquisitions, and may dilute stockholder value.

As part of our business strategy, we acquire and make investments in complementary companies, products, or technologies. The identification of suitable acquisition candidates is difficult, and we may not be able to complete such acquisitions on favorable terms, if at all. In addition, we may be subject to claims or liabilities assumed from an acquired company, product, or technology; acquisitions we complete could be viewed negatively by our end-customers, investors, and securities analysts; and we may incur costs and expenses necessary to address an acquired company's failure to comply with laws and governmental rules and regulations. Additionally, we may be subject to litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders, or other third parties, which may differ from or be more significant than the risks our business faces.

If we are unsuccessful at integrating past or future acquisitions in a timely manner, or the technologies and operations associated with such acquisitions, into our company, our revenue and operating results could be adversely affected. Any integration process may require significant time and resources, which may disrupt our ongoing business and divert management's attention, and we may not be able to manage the integration process successfully or in a timely manner. We may have difficulty retaining key personnel of the acquired business. We may not successfully evaluate or utilize the acquired technology or personnel, realize anticipated synergies from the acquisition, or accurately forecast the financial impact of an acquisition transaction and integration of such acquisition, including accounting charges and any potential impairment of goodwill and intangible assets recognized in connection with such acquisitions. In addition, any acquisitions may be viewed negatively by our customers, financial markets, or investors and may not ultimately strengthen our competitive position or achieve our goals and business strategy.

We may have to pay cash, incur debt, or issue equity or equity-linked securities to pay for any future acquisitions, each of which could adversely affect our financial condition or the market price of our common stock. Furthermore, the sale of equity or issuance of equity-linked debt to finance any future acquisitions could result in dilution to our stockholders. The occurrence of any of these risks could harm our business, operating results, and financial condition.

If we do not accurately predict, prepare for, and respond promptly to rapidly evolving technological and market developments and successfully manage product and subscription introductions and transitions to meet changing end-customer needs in the enterprise security industry, our competitive position and prospects will be harmed.

The enterprise security industry has grown quickly and continues to evolve rapidly. Moreover, many of our end-customers operate in markets characterized by rapidly changing technologies and business plans, which require them to add numerous network access points and adapt increasingly complex enterprise networks, incorporating a variety of hardware, software applications, operating systems, and networking protocols. If we fail to effectively anticipate, identify, and respond to rapidly evolving technological and market developments in a timely manner, our business will be harmed.

In order to anticipate and respond effectively to rapid technological changes and market developments, as well as evolving security threats, we must invest effectively in research and development to increase the reliability, availability, and scalability of our existing products and subscriptions and introduce new products and subscriptions. Our investments in research and development, including investments in AI, may not result in design or performance improvements, marketable products, subscriptions, or features, or may not achieve the cost savings or additional revenue that we expect. In addition, new and evolving products and services, including those that use AI, require significant investment and raise ethical, technological, legal, regulatory, and other challenges, which may negatively affect our brands and demand for our products and services. Because all of these investment areas are inherently risky, no assurance can be given that such strategies and offerings will be successful or will not harm our reputation, financial condition, and operating results.

In addition, we must continually change our products and expand our business strategy in response to changes in network infrastructure requirements, including the expanding use of cloud computing. For example, organizations are moving portions of their data to be managed by third parties, primarily infrastructure, platform, and application service providers, and may rely on such providers' internal security measures. While we have historically been successful in developing, acquiring, and marketing new products and product enhancements that respond to technological change and evolving industry standards, we may not be able to continue to do so, and there can be no assurance that our new or future offerings will be successful or will achieve widespread market acceptance. If we fail to accurately predict and address end-customers' changing needs and emerging technological trends in the enterprise security industry, including in the areas of AI, mobility, virtualization, cloud computing, and software-defined networks, our business could be harmed.

The technology in our portfolio is especially complex because it needs to effectively identify and respond to new and increasingly sophisticated methods of attack, while minimizing the impact on network performance. Additionally, some of our new features and related enhancements may require us to develop new hardware architectures that involve complex, expensive, and time-consuming research and development processes. The development of our portfolio is difficult and the timetable for commercial release and availability is uncertain as there can be long time periods between releases and availability of new features. If we experience unanticipated delays in the availability of new products, features, and subscriptions, and fail to meet customer expectations for such availability, our competitive position and business prospects will be harmed.

The success of new features depends on several factors, including appropriate new product definition, differentiation of new products, subscriptions, and features from those of our competitors, and market acceptance of these products, services, and features. Moreover, successful new product introduction and transition depends on a number of factors, including our ability to manage the risks associated with new product production ramp-up issues, the availability of application software for new products, the effective management of purchase commitments and inventory, the availability of products in appropriate quantities and costs to meet anticipated demand, and the risk that new products may have quality or other defects or deficiencies, especially in the early stages of introduction. There can be no assurance that we will successfully identify opportunities for new products and subscriptions, develop and bring new products and subscriptions to market in a timely manner, achieve market acceptance of our products and subscriptions, or that products, subscriptions, and technologies developed by others will not render our products, subscriptions, and technologies obsolete or noncompetitive.

Issues in the development and deployment of AI may result in reputational harm and legal liability and could adversely affect our results of operations.

We have incorporated, and are continuing to develop and deploy, AI into many of our products and solutions, including services that support our products and solutions. AI presents challenges and risks that could affect our products and solutions, and therefore our business. For example, AI algorithms may have flaws, and datasets used to train models may be insufficient or contain biased information. These potential issues could subject us to regulatory risk, legal liability, including under new proposed legislation regulating AI in jurisdictions such as the EU and regulations being considered in other jurisdictions, and brand or reputational harm.

The rapid evolution of AI, including potential government regulation of AI, requires us to invest significant resources to develop, test, and maintain AI in our products and services in a manner that meets evolving requirements and expectations. The rules and regulations adopted by policymakers over time may require us to make changes to our business practices. Developing, testing, and deploying AI systems may also increase the cost profile of our offerings due to the nature of the computing costs involved in such systems.

The intellectual property ownership and license rights surrounding AI technologies, as well as data protection laws related to the use and development of AI, are currently not fully addressed by courts or regulators. The use or adoption of AI technologies in our products may result in exposure to claims by third parties of copyright infringement or other intellectual property misappropriation, which may require us to pay compensation or license fees to third parties. The evolving legal, regulatory, and compliance framework for AI technologies may also impact our ability to protect our own data and intellectual property against infringing use.

A network or data security incident may allow unauthorized access to our network or data, harm our reputation, create additional liability, and adversely impact our financial results.

Increasingly, companies are subject to a wide variety of attacks on their networks on an ongoing basis. In addition to traditional computer “hackers,” malicious code (such as viruses and worms), phishing attempts, employee theft or misuse, and denial of service attacks, sophisticated nation-state and nation-state supported actors engage in intrusions and attacks (including advanced persistent threat intrusions and supply chain attacks), and add to the risks to our internal networks, cloud-deployed enterprise and customer-facing environments and the information they store and process. Incidences of cyberattacks and other cybersecurity breaches and incidents have increased and are likely to continue to increase. We and our third-party service providers face security threats and attacks from a variety of sources. Despite our efforts and processes to prevent breaches of our internal networks, systems, and websites, our data, corporate systems, and security measures, as well as those of our third-party service providers, are still vulnerable to computer viruses, break-ins, phishing attacks, ransomware attacks, or other types of attacks from outside parties, or breaches due to employee error, malfeasance, or some combination of these. We cannot guarantee that the measures we have taken to protect our networks, systems, and websites will provide adequate security. Furthermore, as a well-known provider of security solutions, we may be a more attractive target for such attacks. The conflict in Ukraine and associated activities in Ukraine and Russia may increase the risk of cyberattacks on various types of infrastructure and operations, and the United States government has warned companies to be prepared for a significant increase in Russian cyberattacks in response to the Sanctions on Russia.

A security breach or incident, or an attack against our service availability suffered by us, or our third-party service providers, could impact our networks or networks secured by our products and subscriptions, creating system disruptions or slowdowns and exploiting security vulnerabilities of our products. In addition, the information stored or otherwise processed on our networks, or those of our third-party service providers, could be accessed, publicly disclosed, altered, lost, stolen, rendered unavailable, or otherwise used or processed without authorization, which could subject us to liability and cause us financial harm. Any actual or perceived breach of security in our systems or networks, or any other actual or perceived data security incident we or our third-party service providers suffer, could result in significant damage to our reputation, negative publicity, loss of channel partners, end-customers, and sales, loss of competitive advantages over our competitors, increased costs to remedy any problems and otherwise respond to any incident, regulatory investigations and enforcement actions, demands, costly litigation, and other liability. In addition, we may incur significant costs and operational consequences of investigating, remediating, eliminating, and putting in place additional tools, devices, and other measures designed to prevent actual or perceived security breaches and other security incidents, as well as the costs to comply with any notification obligations resulting from any security incidents. Any of these negative outcomes could adversely impact the market perception of our products and subscriptions and end-customer and investor confidence in our company and could seriously harm our business or operating results.

Defects, errors, or vulnerabilities in our products, subscriptions, or support offerings, the failure of our products or subscriptions to block a virus or prevent a security breach or incident, misuse of our products, or risks of product liability claims could harm our reputation and adversely impact our operating results.

Because our products and subscriptions are complex, they have contained and may contain design or manufacturing defects or errors that are not detected until after their commercial release and deployment by our end-customers. For example, from time to time, certain of our end-customers have reported defects in our products related to performance, scalability, and compatibility. Additionally, defects may cause our products or subscriptions to be vulnerable to security attacks, cause them to fail to help secure networks, or temporarily interrupt end-customers’ networking traffic. Because the techniques used by computer hackers to access or sabotage networks change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques and provide a solution in time to protect our end-customers’ networks. In addition, due to the Russian invasion of Ukraine, there could be a significant increase in Russian cyberattacks against our customers, resulting in an increased risk of a security breach of our end-customers’ systems. Furthermore, defects or errors in our subscription updates or our products could result in a failure to effectively update end-customers’ hardware and cloud-based products. Our data centers and networks may experience technical failures and downtime or may fail to meet the increased requirements of a growing installed end-customer base, any of which could temporarily or permanently expose our end-customers’ networks, leaving their networks unprotected against the latest security threats. Moreover, our products must interoperate with our end-customers’ existing infrastructure, which often have varied specifications, utilize multiple protocol standards, deploy products from multiple vendors, and contain multiple generations of products that have been added over time. As a result, when problems occur in a network, it may be difficult to identify the sources of these problems.

The occurrence of any such problem in our products and subscriptions, whether real or perceived, could result in:

- expenditure of significant financial and product development resources in efforts to analyze, correct, eliminate, or work-around errors or defects or to address and eliminate vulnerabilities;
- loss of existing or potential end-customers or channel partners;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- an increase in warranty claims compared with our historical experience, or an increased cost of servicing warranty claims, either of which would adversely affect our gross margins; and
- litigation, regulatory inquiries, investigations, or other proceedings, each of which may be costly and harm our reputation.

Further, our products and subscriptions may be misused by end-customers or third parties that obtain access to our products and subscriptions. For example, our products and subscriptions could be used to censor private access to certain information on the Internet. Such use of our products and subscriptions for censorship could result in negative press coverage and negatively affect our reputation.

The limitation of liability provisions in our standard terms and conditions of sale may not fully or effectively protect us from claims as a result of federal, state, or local laws or ordinances, or unfavorable judicial decisions in the United States or other countries. The sale and support of our products and subscriptions also entails the risk of product liability claims. Although we may be indemnified by our third-party manufacturers for product liability claims arising out of manufacturing defects, because we control the design of our products and subscriptions, we may not be indemnified for product liability claims arising out of design defects. While we maintain insurance coverage for certain types of losses, our insurance coverage may not adequately cover any claim asserted against us, if at all. In addition, even claims that ultimately are unsuccessful could result in our expenditure of funds in litigation, divert management's time and other resources, and harm our reputation.

In addition, our classifications of application type, virus, spyware, vulnerability exploits, data, or URL categories may falsely detect, report, and act on applications, content, or threats that do not actually exist. This risk is heightened by the inclusion of a "heuristics" feature in our products and subscriptions, which attempts to identify applications and other threats not based on any known signatures but based on characteristics or anomalies which indicate that a particular item may be a threat. These false positives may impair the perceived reliability of our products and subscriptions and may therefore adversely impact market acceptance of our products and subscriptions and could result in damage to our reputation, negative publicity, loss of channel partners, end-customers and sales, increased costs to remedy any problem, and costly litigation.

Our ability to sell our products and subscriptions is dependent on the quality of our technical support services and those of our channel partners, and the failure to offer high-quality technical support services could have a material adverse effect on our end-customers' satisfaction with our products and subscriptions, our sales, and our operating results.

After our products and subscriptions are deployed within our end-customers' networks, our end-customers depend on our technical support services, as well as the support of our channel partners, to resolve any issues relating to our products. Many larger enterprise, service provider, and government entity end-customers have more complex networks and require higher levels of support than smaller end-customers. If our channel partners do not effectively provide support to the satisfaction of our end-customers, we may be required to provide direct support to such end-customers, which would require us to hire additional personnel and to invest in additional resources. If we are not able to hire such resources fast enough to keep up with unexpected demand, support to our end-customers will be negatively impacted, and our end-customers' satisfaction with our products and subscriptions will be adversely affected. Additionally, to the extent that we may need to rely on our sales engineers to provide post-sales support while we are ramping up our support resources, our sales productivity will be negatively impacted, which would harm our revenues. Accordingly, our failure, or our channel partners' failure, to provide and maintain high-quality support services could have a material adverse effect on our business, financial condition, and operating results.

RISKS RELATED TO INTELLECTUAL PROPERTY AND TECHNOLOGY LICENSING

Claims by others that we infringe their intellectual property rights could harm our business.

Companies in the enterprise security industry own large numbers of patents, copyrights, trademarks, domain names, and trade secrets and frequently enter into litigation based on allegations of infringement, misappropriation, or other violations of intellectual property rights. In addition, non-practicing entities also frequently bring claims of infringement of intellectual property rights. Third parties are asserting, have asserted, and may in the future assert claims of infringement of intellectual property rights against us.

Third parties may also assert such claims against our end-customers or channel partners, whom our standard license and other agreements obligate us to indemnify against claims that our products and subscriptions infringe the intellectual property rights of third parties. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited, that they have divulged proprietary or other confidential information, or that their former employers own their inventions or other work product. Furthermore, we may be unaware of the intellectual property rights of others that may cover some or all of our technology, products, subscriptions, and services. As we expand our footprint, both in our platforms, products, subscriptions, and services and geographically, more overlaps occur and we may face more infringement claims both in the United States and abroad.

While we have been increasing the size of our patent portfolio, our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we have. In addition, litigation has involved and will likely continue to involve patent-holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may therefore provide little or no deterrence or protection. In addition, we have not registered our trademarks in all of our geographic markets and failure to secure those registrations could adversely affect our ability to enforce and defend our trademark rights. Any claim of infringement by a third party, even those without merit, could cause us to incur substantial costs defending against the claim, could distract our management from our business, and could require us to cease use of such intellectual property. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. A successful claimant could secure a judgment, or we may agree to a settlement that prevents us from distributing certain products or performing certain services or that requires us to pay substantial damages, royalties, or other fees. Any of these events could seriously harm our business, financial condition, and operating results.

Our proprietary rights may be difficult to enforce or protect, which could enable others to copy or use aspects of our products or subscriptions without compensating us.

We rely and expect to continue to rely on a combination of confidentiality and license agreements with our employees, consultants, and third parties with whom we have relationships, as well as trademark, copyright, patent, and trade secret protection laws, to protect our proprietary rights. We have filed various applications for certain aspects of our intellectual property. Valid patents may not issue from our pending applications, and the claims eventually allowed on any patents may not be sufficiently broad to protect our technology or products and subscriptions. We cannot be certain that we were the first to make the inventions claimed in our pending patent applications or that we were the first to file for patent protection, which could prevent our patent applications from issuing as patents or invalidate our patents following issuance. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Any issued patents may be challenged, invalidated or circumvented, and any rights granted under these patents may not actually provide adequate defensive protection or competitive advantages to us. Additional uncertainty may result from changes to patent-related laws and court rulings in the United States and other jurisdictions. As a result, we may not be able to obtain adequate patent protection or effectively enforce any issued patents.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or subscriptions or obtain and use information that we regard as proprietary. We generally enter into confidentiality or license agreements with our employees, consultants, vendors, and end-customers, and generally limit access to and distribution of our proprietary information. However, we cannot be certain that we have entered into such agreements with all parties who may have or have had access to our confidential information or that the agreements we have entered into will not be breached. We cannot guarantee that any of the measures we have taken will prevent misappropriation of our technology. Because we may be an attractive target for computer hackers, we may have a greater risk of unauthorized access to, and misappropriation of, our proprietary information. In addition, the laws of some foreign countries do not protect our proprietary rights to as great an extent as the laws of the United States, and many foreign countries do not enforce these laws as diligently as government agencies and private parties in the United States. From time to time, we may need to take legal action to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could negatively affect our business, operating results, and financial condition. Attempts to enforce our rights against third parties could also provoke these third parties to assert their own intellectual property or other rights against us or result in a holding that invalidates or narrows the scope of our rights, in whole or in part. If we are unable to protect our proprietary rights (including aspects of our software and products protected other than by patent rights), we may find ourselves at a competitive disadvantage to others who need not incur the additional expense, time, and effort required to create the innovative products that have enabled us to be successful to date. Any of these events would have a material adverse effect on our business, financial condition, and operating results.

Our use of open source software in our products and subscriptions could negatively affect our ability to sell our products and subscriptions and subject us to possible litigation.

Our products and subscriptions contain software modules licensed to us by third-party authors under “open source” licenses. Some open source licenses contain requirements that we make available applicable source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products or subscriptions with lower development effort and time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source software to avoid subjecting our products and subscriptions to conditions we do not intend, the terms of many open source licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products and subscriptions. From time to time, there have been claims against companies that distribute or use open source software in their products and subscriptions, asserting that open source software infringes the claimants’ intellectual property rights. We could be subject to suits by parties claiming infringement of intellectual property rights in what we believe to be licensed open source software. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products and subscriptions on terms that are not economically feasible, to reengineer our products and subscriptions, to discontinue the sale of our products and subscriptions if reengineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, operating results, and financial condition.

In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or assurance of title or controls on origin of the software. In addition, many of the risks associated with usage of open source software, such as the lack of warranties or assurances of title, cannot be eliminated, and could, if not properly addressed, negatively affect our business. We have established processes to help alleviate these risks, including a review process for screening requests from our development organizations for the use of open source software, but we cannot be sure that our processes for controlling our use of open source software in our products and subscriptions will be effective.

We license technology from third parties, and our inability to maintain those licenses could harm our business.

We incorporate technology that we license from third parties, including software, into our products and subscriptions. We cannot be certain that our licensors are not infringing the intellectual property rights of third parties or that our licensors have sufficient rights to the licensed intellectual property in all jurisdictions in which we may sell our products and subscriptions. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Some of our agreements with our licensors may be terminated for convenience by them. We may also be subject to additional fees or be required to obtain new licenses if any of our licensors allege that we have not properly paid for such licenses or that we have improperly used the technologies under such licenses, and such licenses may not be available on terms acceptable to us or at all. If we are unable to continue to license any of this technology because of intellectual property infringement claims brought by third parties against our licensors or against us, or claims against us by our licensors, or if we are unable to continue our license agreements or enter into new licenses on commercially reasonable terms, our ability to develop and sell products and subscriptions containing such technology would be severely limited and our business could be harmed. Additionally, if we are unable to license necessary technology from third parties, we may be forced to acquire or develop alternative technology, which we may be unable to do in a commercially feasible manner or at all, and we may be required to use alternative technology of lower quality or performance standards. This would limit and delay our ability to offer new or competitive products and subscriptions and increase our costs of production. As a result, our margins, market share, and operating results could be significantly harmed.

RISKS RELATED TO OPERATIONS

Because we depend on manufacturing partners to build and ship our hardware products, we are susceptible to manufacturing and logistics delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and end-customers.

We depend on manufacturing partners, primarily our EMS provider, Flex, to manufacture our hardware product lines. Our reliance on these manufacturing partners reduces our control over the manufacturing process and exposes us to risks, including reduced control over quality assurance, product costs, product supply, timing, and transportation risk. Our hardware products are manufactured by our manufacturing partners at facilities located primarily in the United States. Some of the components in our products are sourced either through Flex or directly by us from component suppliers outside the United States. The portion of our hardware products that are sourced outside the United States may subject us to geopolitical risks, additional logistical risks or risks associated with complying with local rules and regulations in foreign countries.

Significant changes to existing international trade agreements could lead to sourcing or logistics disruption resulting from import delays or the imposition of increased tariffs on our sourcing partners. For example, the United States and Chinese governments have each enacted, and discussed additional, import tariffs. Some components that we import for final manufacturing in the United States have been impacted by these tariffs. As a result, our costs have increased and we have raised, and may be required to further raise, prices on our hardware products, all of which could severely impair our ability to fulfill orders.

Our manufacturing partners typically fulfill our supply requirements on the basis of individual purchase orders. We do not have long-term contracts with these manufacturers that guarantee capacity, the continuation of particular pricing terms, or the extension of credit limits. Accordingly, they are not obligated to continue to fulfill our supply requirements and the prices we pay for manufacturing services could be increased on short notice. Our contract with Flex permits them to terminate the agreement for their convenience, subject to prior notice requirements. If we are required to change manufacturing partners, our ability to meet our scheduled product deliveries to our end-customers could be adversely affected, which could cause the loss of sales to existing or potential end-customers, delayed revenue or an increase in our costs which could adversely affect our gross margins. Any production interruptions for any reason, such as a natural disaster, epidemic or pandemic, capacity shortages, or quality problems at one of our manufacturing partners would negatively affect sales of our product lines manufactured by that manufacturing partner and adversely affect our business and operating results.

Managing the supply of our hardware products and product components is complex. Insufficient supply and inventory would result in lost sales opportunities or delayed revenue, while excess inventory would harm our gross margins.

Our manufacturing partners procure components and build our hardware products based on our forecasts, and we generally do not hold inventory for a prolonged period of time. These forecasts are based on estimates of future demand for our products, which are in turn based on historical trends and analyses from our sales and product management organizations, adjusted for overall market conditions. In order to reduce manufacturing lead times and plan for adequate component supply, from time to time we may issue forecasts for components and products that are non-cancelable and non-returnable.

Our inventory management systems and related supply chain visibility tools may be inadequate to enable us to forecast accurately and effectively manage supply of our hardware products and product components. If we ultimately determine that we have excess supply, we may have to reduce our prices and write-down inventory, which in turn could result in lower gross margins. If our actual component usage and product demand are lower than the forecast we provide to our manufacturing partners, we accrue for losses on manufacturing commitments in excess of forecasted demand. Alternatively, insufficient supply levels may lead to shortages that result in delayed hardware product revenue or loss of sales opportunities altogether as potential end-customers turn to competitors' products that are readily available. If we are unable to effectively manage our supply and inventory, our operating results could be adversely affected.

Because some of the key components in our hardware products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which, in certain cases, have disrupted or delayed our scheduled product deliveries to our end-customers, increased our costs and may result in the loss of sales and end-customers.

Our hardware products rely on key components, including integrated circuit components, which our manufacturing partners purchase on our behalf from a limited number of component suppliers, including sole source providers. The manufacturing operations of some of our component suppliers are geographically concentrated in Asia and elsewhere, which makes our supply chain vulnerable to regional disruptions, such as natural disasters, fire, political instability, civil unrest, power outages, or health risks. In the past, we experienced supply chain disruption and have incurred increased costs resulting from inflationary pressures. We are also monitoring the tensions between China and Taiwan, and between the U.S. and China, which could have an adverse impact on our business or results of operations in future periods.

Further, we do not have volume purchase contracts with any of our component suppliers, and they could cease selling to us at any time. If we are unable to obtain a sufficient quantity of these components in a timely manner for any reason, sales of our hardware products could be delayed or halted, or we could be forced to expedite shipment of such components or our hardware products at dramatically increased costs. Our component suppliers also change their selling prices frequently in response to market trends, including industry-wide increases in demand. Because we do not have, for the most part, volume purchase contracts with our component suppliers, we are susceptible to price fluctuations related to raw materials and components and may not be able to adjust our prices accordingly. Additionally, poor quality in any of the sole-sourced components in our products could result in lost sales or sales opportunities.

If we are unable to obtain a sufficient volume of the necessary components for our hardware products on commercially reasonable terms or the quality of the components do not meet our requirements, we could also be forced to redesign our products and qualify new components from alternate component suppliers. The resulting stoppage or delay in selling our hardware products and the expense of redesigning our hardware products would result in lost sales opportunities and damage to customer relationships, which would adversely affect our business and operating results.

If we are unable to attract, retain, and motivate our key technical, sales, and management personnel, our business could suffer.

Our future success depends, in part, on our ability to continue to attract, retain, and motivate the members of our management team and other key employees. For example, we are substantially dependent on the continued service of our engineering personnel because of the complexity of our offerings. Competition for highly skilled personnel, particularly in engineering, including in the areas of AI and machine learning, is often intense, especially in the San Francisco Bay Area, where we have a substantial presence and need for such personnel. In addition, the industry in which we operate generally experiences high employee attrition. Our future performance depends on the continuing services and contributions of our senior management to execute on our business plan and to identify and pursue new opportunities and product innovations. If we are unable to hire, integrate, train, or retain the qualified and highly skilled personnel required to fulfill our current or future needs, our business, financial condition, and operating results could be harmed.

Further, we believe that a critical contributor to our success and our ability to retain highly skilled personnel has been our corporate culture, which we believe fosters innovation, inclusion, teamwork, passion for end-customers, focus on execution, and the facilitation of critical knowledge transfer and knowledge sharing. As we grow and change, we may find it difficult to maintain these important aspects of our corporate culture. While we are taking steps to develop a more inclusive and diverse workforce, there is no guarantee that we will be able to do so. Any failure to preserve our culture as we grow could limit our ability to innovate and could negatively affect our ability to retain and recruit personnel, continue to perform at current levels or execute on our business strategy.

We generate a significant amount of revenue from sales to distributors, resellers, and end-customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.

Our ability to grow our business and our future success will depend to a significant extent on our ability to expand our operations and customer base worldwide. Many of our customers, resellers, partners, suppliers, and manufacturers operate around the world. Operating in a global marketplace, we are subject to risks associated with having an international reach and compliance and regulatory requirements. We may experience difficulties in attracting, managing, and retaining an international staff, and we may not be able to recruit and maintain successful strategic distributor relationships internationally. Business practices in the international markets that we serve may differ from those in the United States and may require us in the future to include terms other than our standard terms related to payment, warranties, or performance obligations in end-customer contracts.

Additionally, our international sales and operations are subject to a number of risks, including the following:

- political, economic, and social uncertainty around the world, health risks such as epidemics and pandemics like COVID-19, macroeconomic challenges in Europe, terrorist activities, Russia's invasion of Ukraine, tensions between China and Taiwan, the recent hostilities in Israel and the surrounding region, and continued hostilities in the Middle East;
- unexpected changes in, or the application of, foreign and domestic laws and regulations (including intellectual property rights protections), regulatory practices, trade restrictions, and foreign legal requirements, including those applicable to the importation, certification, and localization of our products, tariffs, and tax laws and treaties, including regulatory and trade policy changes adopted by the current administration, such as the Sanctions on Russia, or foreign countries in response to regulatory changes adopted by the current administration; and
- non-compliance with U.S. and foreign laws, including antitrust regulations, anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, U.S. or foreign sanctions regimes and export or import control laws, and any trade regulations ensuring fair trade practices.

These and other factors could harm our future international revenues and, consequently, materially impact our business, operating results, and financial condition. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources. Our failure to successfully manage our international operations and the associated risks effectively could limit the future growth of our business.

We are exposed to fluctuations in foreign currency exchange rates, which could negatively affect our financial condition and operating results.

Our sales contracts are denominated in U.S. dollars, and therefore, our revenue is not subject to foreign currency risk; however, in the event of a strengthening of the U.S. dollar against foreign currencies in which we conduct business, the cost of our products to our end-customers outside of the United States would increase, which could adversely affect our financial condition and operating results. In addition, increased international sales in the future, including through our channel partners and other partnerships, may result in foreign currency denominated sales, increasing our foreign currency risk.

Our operating expenses incurred outside the United States and denominated in foreign currencies are generally increasing and are subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with foreign currency fluctuations, our financial condition and operating results could be adversely affected. We have entered into forward contracts in an effort to reduce our foreign currency exchange exposure related to our foreign currency denominated expenditures. As of October 31, 2023, the total notional amount of our outstanding foreign currency forward contracts was \$777.9 million. For more information on our hedging transactions, refer to Note 6. Derivative Instruments in Part I, Item 1 of this Quarterly Report on Form 10-Q. The effectiveness of our existing hedging transactions and the availability and effectiveness of any hedging transactions we may decide to enter into in the future may be limited and we may not be able to successfully hedge our exposure, which could adversely affect our financial condition and operating results.

We face risks associated with having operations and employees located in Israel.

We have business operations in Israel, and intend to continue growing our presence in Israel. Our operations in Israel could be disrupted by political instability, civil unrest, terrorist attacks, acts of violence, acts of war, or other military actions, including the recent hostilities in Israel and the surrounding region. The future of peace efforts between Israel and its Arab neighbors remains uncertain. The effects of hostilities and violence on the Israeli economy and our operations in Israel are unclear, and we cannot predict the effect on us of further increases in these hostilities or future armed conflict, political instability, or violence in the region. Current or future tensions and conflicts in the Middle East could adversely affect our business, operating results, financial condition, and cash flows.

In addition, many of our employees in Israel are obligated to perform annual reserve duty in the Israeli military and are subject to being called for active duty under emergency circumstances, which has occurred as a result of recent hostilities in Israel and the surrounding region. We cannot predict the full impact of these conditions on us in the future, particularly if emergency circumstances or an escalation in the political situation occurs. If many of our employees in Israel are called for active duty for a significant period of time, our operations and our business could be disrupted and may not be able to function at full capacity. Any disruption in our operations in Israel could adversely affect our business.

We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

Because we incorporate encryption technology into our products, certain of our products are subject to U.S. export controls and may be exported outside the United States only with the required export license or through an export license exception. If we were to fail to comply with U.S. export licensing requirements, U.S. customs regulations, U.S. economic sanctions, or other laws, we could be subject to substantial civil and criminal penalties, including fines, incarceration for responsible employees and managers, and the possible loss of export or import privileges. Obtaining the necessary export license for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products to U.S. embargoed or sanctioned countries, governments, and persons. Even though we take precautions to ensure that our channel partners comply with all relevant regulations, any failure by our channel partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations, and penalties.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our end-customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products into international markets, prevent our end-customers with international operations from deploying our products globally or, in some cases, prevent or delay the export or import of our products to certain countries, governments, or persons altogether. Any change in export or import regulations, economic sanctions, such as the Sanctions on Russia, or related legislation, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons, or technologies targeted by such regulations could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential end-customers with international operations. Any decreased use of our products or limitation on our ability to export to or sell our products in international markets would likely adversely affect our business, financial condition, and operating results.

RISKS RELATED TO PRIVACY AND DATA PROTECTION

Our actual or perceived failure to adequately protect personal data could have a material adverse effect on our business.

A wide variety of laws and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data in jurisdictions where we and our customers operate. Compliance with these laws and regulations is difficult and costly. These laws and regulations are also subject to frequent and unexpected changes, new or additional laws or regulations may be adopted, and rulings that invalidate prior laws or regulations may be issued. For example, we are subject to the E.U. General Data Protection Regulation (“E.U. GDPR”) and the U.K. General Data Protection Regulation (“U.K. GDPR,” and collectively the “GDPR”), both of which impose stringent data protection requirements, provide for costly penalties for noncompliance (up to the greater of (a) €20 million under the “E.U. GDPR” or £17.5 million under the “U.K. GDPR,” and (b) 4% of annual worldwide turnover), and confer the right upon data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations.

The GDPR requires, among other things, that personal data be transferred outside of the E.U. (or, in the case of the U.K. GDPR, the U.K.) to the United States and other jurisdictions only where adequate safeguards are implemented or a derogation applies. In practice, we rely on standard contractual clauses approved under the GDPR to carry out such transfers and to receive personal data subject to the GDPR (directly or indirectly) in the United States. In the future, we may self-certify to the EU-U.S. Data Privacy Framework (“EU-U.S. DPF”), which has been approved for transfers of personal data subject to the GDPR to the United States and requires public disclosures of adherence to data protection principles and the submission of jurisdiction to European regulatory authorities. Following the “Schrems II” decision by the Court of Justice of the European Union, transfers of personal data to recipients in third countries are also subject to additional assessments and safeguards beyond the implementation of approved transfer mechanisms. The decision imposed a requirement for companies to carry out an assessment of the laws and practices governing access to personal data in the third country to ensure an essentially equivalent level of data protection to that afforded in the E.U.

Among other effects, we may experience additional costs associated with increased compliance burdens, reduced demand for our offerings from current or prospective customers in the European Economic Area (“EEA”), Switzerland, and the U.K. (collectively, “Europe”) to use our products, on account of the risks identified in the Schrems II decision, and we may find it necessary or desirable to make further changes to our processing of personal data of European residents. The regulatory environment applicable to the handling of European residents’ personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs, including in the event we self-certify to the EU-U.S. DPF. Moreover, much like with Schrems II, we anticipate future legal challenges to the approved data transfer mechanisms between Europe and the United States, including a challenge to the EU-U.S. DPF. Such legal challenges could result in additional legal and regulatory risk, compliance costs, and in our business, operating results, and financial condition being harmed. Additionally, we and our customers may face risk of enforcement actions by data protection authorities in Europe relating to personal data transfers to us and by us from Europe. Any such enforcement actions could result in substantial costs and diversion of resources, and distract management and technical personnel. These potential liabilities and enforcement actions could also have an overall negative effect on our business, operating results, and financial condition.

We are also subject to the California Consumer Privacy Act, as amended by the California Privacy Rights Act (collectively, the “CCPA”). The CCPA requires, among other things, covered companies to provide enhanced disclosures to California consumers and to afford such consumers certain rights regarding their personal data, including the right to opt out of data sales for targeted advertising, and creates a private right of action to individuals affected by a data breach, if the breach was caused by a lack of reasonable security. The effects of the CCPA have been significant, requiring us to modify our data processing practices and policies and to incur substantial costs and expenses for compliance. Moreover, additional state privacy laws have been passed and will require potentially substantial efforts to obtain compliance. These include laws enacted in at least nine states, which all go into effect by January 1, 2026.

We may also from time to time be subject to obligations relating to personal data by contract, or face assertions that we are subject to self-regulatory obligations or industry standards. Additionally, the Federal Trade Commission and many state attorneys general are more regularly bringing enforcement actions in connection with federal and state consumer protection laws for false or deceptive acts or practices in relation to the online collection, use, dissemination, and security of personal data. Internationally, data localization laws may mandate that personal data collected in a foreign country be processed and stored within that country. New legislation affecting the scope of personal data and personal information where we or our customers and partners have operations, especially relating to classification of Internet Protocol (“IP”) addresses, machine identification, AI, location data, and other information, may limit or inhibit our ability to operate or expand our business, including limiting strategic partnerships that may involve the sharing or uses of data, and may require significant expenditures and efforts in order to comply. Notably, public perception of potential privacy, data protection, or information security concerns—whether or not valid—may harm our reputation and inhibit adoption of our products and subscriptions by current and future end-customers. Each of these laws and regulations, and any changes to these laws and regulations, or new laws and regulations, could impose significant limitations, or require changes to our business model or practices or growth strategy, which may increase our compliance expenses and make our business more costly or less efficient to conduct.

Tax, Accounting, Compliance, and Regulatory Risks

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate structure and intercompany arrangements, including the manner in which we develop, value, and use our intellectual property and the valuations of our intercompany transactions. The tax laws applicable to our business, including the laws of the United States and various other jurisdictions, are subject to interpretation and certain jurisdictions may aggressively interpret their laws, regulations, and policies, including in an effort to raise additional tax revenue. The tax authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed or acquired technology or determining the proper charges for intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position and operating results. Some tax authorities of jurisdictions other than the United States may seek to assert extraterritorial taxing rights on our transactions or operations. It is possible that domestic or international tax authorities may subject us to tax examinations, or audits, and such tax authorities may disagree with certain positions we have taken, and any adverse outcome of such an examination, review or audit could result in additional tax liabilities and penalties and otherwise have a negative effect on our financial position and operating results. Further, the determination of our worldwide provision for or benefit from income taxes and other tax liabilities requires significant judgment by management, and there are transactions where the ultimate tax determination is uncertain. Although we believe that our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded on our consolidated financial statements and may materially affect our financial results in the period or periods for which such determination is made.

In addition, our future income tax obligations could be adversely affected by changes in, or interpretations of, tax laws, regulations, policies, or decisions in the United States or in the other jurisdictions in which we operate.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported on our condensed consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue, and expenses that are not readily apparent from other sources. For more information, refer to the section entitled "Critical Accounting Estimates" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part I, Item 2 of this Quarterly Report on Form 10-Q. In general, if our estimates, judgments or assumptions relating to our critical accounting policies change or if actual circumstances differ from our estimates, judgments or assumptions, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

We are obligated to maintain proper and effective internal control over financial reporting. We may not complete our analysis of our internal control over financial reporting in a timely manner, or our internal control may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

If we are unable to assert that our internal controls are effective, our independent registered public accounting firm may not be able to formally attest to the effectiveness of our internal control over financial reporting. If, in the future, our chief executive officer, chief financial officer, or independent registered public accounting firm determines that our internal control over financial reporting is not effective as defined under Section 404, we could be subject to one or more investigations or enforcement actions by state or federal regulatory agencies, stockholder lawsuits, or other adverse actions requiring us to incur defense costs, pay fines, settlements, or judgments, causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our stock.

Our reputation and/or business could be negatively impacted by ESG matters and/or our reporting of such matters.

There is an increasing focus from regulators, certain investors, and other stakeholders concerning ESG matters, both in the United States and internationally. We communicate certain ESG-related initiatives, goals, and/or commitments regarding environmental matters, diversity, responsible sourcing and social investments, and other matters in our annual ESG Report, on our website, in our filings with the SEC, and elsewhere. These initiatives, goals, or commitments could be difficult to achieve and costly to implement. We could fail to achieve, or be perceived to fail to achieve, our ESG-related initiatives, goals, or commitments. In addition, we could be criticized for the timing, scope or nature of these initiatives, goals, or commitments, or for any revisions to them. To the extent that our required and voluntary disclosures about ESG matters increase, we could be criticized for the accuracy, adequacy, or completeness of such disclosures. Our actual or perceived failure to achieve our ESG-related initiatives, goals, or commitments could negatively impact our reputation, result in ESG-focused investors not purchasing and holding our stock, or otherwise materially harm our business.

Failure to comply with governmental laws and regulations could harm our business.

Our business is subject to regulation by various federal, state, local, and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, privacy, data security, and data-protection laws, anti-bribery laws (including the U.S. Foreign Corrupt Practices Act and the U.K. Anti-Bribery Act), import/export controls, federal securities laws, and tax laws and regulations. These laws and regulations may also impact our innovation and business drivers in developing new and emerging technologies (e.g., AI and machine learning). In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, or injunctions. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation resulting from any alleged noncompliance, our business, operating results, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions, litigation, and sanctions could harm our business, operating results, and financial condition.

Risks Related to Our Notes and Common Stock

We may not have the ability to raise the funds necessary to settle conversions of our Notes, repurchase our Notes upon a fundamental change, or repay our Notes in cash at their maturity, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of our Notes.

In June 2020, we issued our 2025 Notes. We will need to make cash payments (a) if holders of our 2025 Notes require us to repurchase all, or a portion of, their 2025 Notes upon the occurrence of a fundamental change (e.g., a change of control of Palo Alto Networks, Inc.) before the maturity date, (b) upon conversion of our 2025 Notes, or (c) to repay our 2025 Notes in cash at their maturity unless earlier converted or repurchased. Effective November 1, 2023 through January 31, 2024, all of the 2025 Notes are convertible. If all of the note holders decided to convert their 2025 Notes, we would be obligated to pay the \$2.0 billion principal amount of the 2025 Notes in cash. Under the terms of the 2025 Notes, we also have the option to settle the amount of our conversion obligation in excess of the aggregate principal amount of the 2025 Notes in cash or shares of our common stock. If our cash provided by operating activities, together with our existing cash, cash equivalents, and investments, and existing sources of financing, are inadequate to satisfy these obligations, we will need to obtain third-party financing, which may not be available to us on commercially reasonable terms or at all, to meet these payment obligations.

In addition, our ability to repurchase or to pay cash upon conversion of our 2025 Notes may be limited by law, regulatory authority, or agreements governing our future indebtedness. Our failure to repurchase our 2025 Notes at a time when the repurchase is required by the applicable indenture governing such 2025 Notes or to pay cash upon conversion of such 2025 Notes as required by the applicable indenture would constitute a default under the indenture. A default under the applicable indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the payment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase our 2025 Notes or to pay cash upon conversion of our 2025 Notes.

We may still incur substantially more debt or take other actions that would diminish our ability to make payments on our Notes when due.

We and our subsidiaries may incur substantial additional debt in the future, subject to the restrictions contained in our debt instruments, that could have the effect of diminishing our ability to make payments on our 2025 Notes when due.

The market price of our common stock historically has been volatile, and the value of an investment in our common stock could decline.

The market price of our common stock has historically been, and is likely to continue to be, volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control and unrelated to our business, operating results, or financial condition. These fluctuations could cause a loss of all or part of an investment in our common stock. Factors that could cause fluctuations in the market price of our common stock include, but are not limited to:

- announcements of new products, subscriptions or technologies, commercial relationships, strategic partnerships, acquisitions, or other events by us or our competitors;
- price and volume fluctuations in the overall stock market from time to time;
- news announcements that affect investor perception of our industry, including reports related to the discovery of significant cyberattacks;
- significant volatility in the market price and trading volume of technology companies in general and of companies in our industry;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes in our operating results or fluctuations in our operating results;

- whether our operating results meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of securities analysts or investors, whether as a result of our forward-looking statements, our failure to meet such expectations or otherwise;
- inaccurate or unfavorable research reports about our business and industry published by securities analysts or reduced coverage of our company by securities analysts;
- litigation involving us, our industry, or both;
- actions instituted by activist shareholders or others;
- regulatory developments in the United States, foreign countries, or both;
- major catastrophic events;
- sales or repurchases of large blocks of our common stock or substantial future sales by our directors, executive officers, employees, and significant stockholders;
- departures of key personnel; or
- geopolitical or economic uncertainty around the world.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Securities litigation could result in substantial costs, divert our management's attention and resources from our business, and have a material adverse effect on our business, operating results, and financial condition.

The convertible note hedge and warrant transactions may affect the value of our common stock.

In connection with the sale of our 2025 Notes, we entered into convertible note hedge transactions (the "2025 Note Hedges") with certain counterparties. In connection with each such sale of the 2025 Notes, we also entered into warrant transactions with the counterparties pursuant to which we sold warrants (the "2025 Warrants") for the purchase of our common stock. In addition, we also entered into warrant transactions in connection with our 2023 Notes (together with the 2025 Warrants, the "Warrants"). The 2025 Note Hedges for our 2025 Notes are generally expected to reduce the potential dilution to our common stock upon any conversion of our 2025 Notes. The Warrants could separately have a dilutive effect to the extent that the market price per share of our common stock exceeds the applicable strike price of the Warrants unless, subject to certain conditions, we elect to cash settle such Warrants.

The applicable counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the outstanding 2025 Notes (and are likely to do so during any applicable observation period related to a conversion of our 2025 Notes). This activity could also cause or prevent an increase or a decrease in the market price of our common stock or our 2025 Notes, which could affect a note holder's ability to convert its 2025 Notes and, to the extent the activity occurs during any observation period related to a conversion of our 2025 Notes, it could affect the amount and value of the consideration that the note holder will receive upon conversion of our 2025 Notes.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of our 2025 Notes or our common stock. In addition, we do not make any representation that the counterparties or their respective affiliates will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans, the conversion of our Notes or exercise of the related Warrants, or otherwise will dilute stock held by all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to 1.0 billion shares of common stock and up to 100.0 million shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue shares of common stock or securities convertible into shares of our common stock from time to time in connection with a financing, acquisition, investment, our stock incentive plans, the conversion of our 2025 Notes, the settlement of our Warrants, or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and cause the market price of our common stock to decline.

We cannot guarantee that our share repurchase program will be fully consummated or that it will enhance shareholder value, and share repurchases could affect the price of our common stock.

As of October 31, 2023, we had \$683.3 million available under our share repurchase program. On November 16, 2023, our board of directors authorized a \$316.7 million increase to our share repurchase program, bringing the total remaining authorization for future share repurchases to \$1.0 billion. The repurchase authorization will expire on December 31, 2024, and may be suspended or discontinued at any time without prior notice. Such share repurchase program may be suspended or discontinued by the Company at any time without prior notice. Although our board of directors has authorized a share repurchase program, we are not obligated to repurchase any specific dollar amount or to acquire any specific number of shares under the program. The share repurchase program could affect the price of our common stock, increase volatility, and diminish our cash reserves. In addition, the program may be suspended or terminated at any time, which may result in a decrease in the price of our common stock.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any dividends on our common stock. We intend to retain any earnings to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the future. As a result, stockholders may only receive a return on their investments in our common stock if the market price of our common stock increases.

Our charter documents and Delaware law, as well as certain provisions contained in the indentures governing our Notes, could discourage takeover attempts and lead to management entrenchment, which could also reduce the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control of our company or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- establish that our board of directors is divided into three classes, Class I, Class II, and Class III, with three-year staggered terms;
- authorize our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval;
- provide our board of directors with the exclusive right to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death, or removal of a director;
- prohibit our stockholders from taking action by written consent;
- specify that special meetings of our stockholders may be called only by the chairman of our board of directors, our president, our secretary, or a majority vote of our board of directors;
- require the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the issuance of preferred stock and management of our business or our amended and restated bylaws;
- authorize our board of directors to amend our bylaws by majority vote; and
- establish advance notice procedures with which our stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for our stockholders to replace members of our board of directors, which is responsible for appointing the members of management. In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. Additionally, certain provisions contained in the indenture governing our 2025 Notes could make it more difficult or more expensive for a third party to acquire us. The application of Section 203 or certain provisions contained in the indenture governing our 2025 Notes also could have the effect of delaying or preventing a change in control of us. Any of these provisions could, under certain circumstances, depress the market price of our common stock.

General Risk Factors

Our business is subject to the risks of earthquakes, fire, power outages, floods, health risks, and other catastrophic events, and to interruption by man-made problems, such as terrorism.

Both our corporate headquarters and the location where our products are manufactured are located in the San Francisco Bay Area, a region known for seismic activity. In addition, other natural disasters, such as fire or floods, a significant power outage, telecommunications failure, terrorism, an armed conflict, cyberattacks, epidemics and pandemics such as COVID-19, or other geopolitical unrest could affect our supply chain, manufacturers, logistics providers, channel partners, end-customers, or the economy as a whole, and such disruption could impact our shipments and sales. These risks may be further increased if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, the loss of customers, or the delay in the manufacture, deployment, or shipment of our products, our business, financial condition, and operating results would be adversely affected.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products and subscriptions could reduce our ability to compete and could harm our business.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new features to enhance our portfolio, improve our operating infrastructure, or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we engage in future debt financings, the holders of such additional debt would have priority over the holders of our common stock. Current and future indebtedness may also contain terms that, among other things, restrict our ability to incur additional indebtedness. In addition, we may be required to take other actions that would otherwise be in the interests of the debt holders and would require us to maintain specified liquidity or other ratios, any of which could harm our business, operating results, and financial condition. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be adversely affected.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

During the three months ended October 31, 2023, holders of the 2025 Notes converted \$46.0 million in aggregate principal amount of the 2025 Notes, which we repaid in cash. We also issued 0.3 million shares of our unregistered common stock to the holders of the 2025 Notes for the conversion value in excess of the principal amount. These shares of our common stock were issued in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the "Securities Act").

During the three months ended October 31, 2023, we issued 3.1 million shares of our common stock to holders of the 2023 Warrants. The shares of common stock issued upon exercise of these warrants were issued in reliance on an exemption from registration provided by Section 3(a)(9) of the Securities Act.

Additionally, during the three months ended October 31, 2023, we issued a total of 2,875 shares of our unregistered common stock in connection with certain of our acquisitions (the "Transactions"). The Transactions did not involve any underwriters, any underwriting discounts or commissions, or any public offering. The issuances of the securities pursuant to the Transactions were exempt from registration under the Securities Act by virtue of Section 4(a)(2) of the Act and Rule 506 of Regulation D promulgated thereunder.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes stock repurchases during the three months ended October 31, 2023 (in millions, except per share amounts):

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
August 1, 2023 to August 31, 2023 ⁽²⁾	—	\$ 234.56	—	\$ 750.0
September 1, 2023 to September 30, 2023 ⁽²⁾	0.3	\$ 226.79	0.3	\$ 683.3
October 1, 2023 to October 31, 2023 ⁽²⁾	—	\$ 253.13	—	\$ 683.3
Total	0.3	\$ 230.99	0.3	

⁽¹⁾ In February 2019, we announced that our board of directors authorized a \$1.0 billion share repurchase program, which is funded from available working capital. In December 2020, August 2021, and August 2022, we announced additional \$700.0 million, \$676.1 million, and \$915.0 million increases to this share repurchase program, respectively, bringing the total authorization to \$3.3 billion, with \$683.3 million remaining as of October 31, 2023. The expiration date of this repurchase authorization was extended to December 31, 2023, and our repurchase program may be suspended or discontinued at any time. Repurchases under our program are to be made at management's discretion on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing.

⁽²⁾ Includes shares of restricted common stock delivered by certain employees upon vesting of equity awards to satisfy tax withholding requirements. The number of shares delivered by these employees to satisfy tax withholding requirements during the period was not significant.

Item 5. Other Information

Trading Plans of Directors and Executive Officers

Set forth below is certain information regarding Rule 10b5-1 trading plans adopted by our directors and officers (as defined in Rule 16a-1(f)) during the first quarter of fiscal 2024. The Rule 10b5-1 trading plans listed below are each intended to satisfy the affirmative defense of Rule 10b5-1(c).

Name	Title	Date Plan Was Adopted	Expiration Date	Total Amount of Common Stock to be Sold Under the Plan
Dipak Golechha	Executive Vice President, Chief Financial Officer	September 13, 2023	December 31, 2024 or when all shares have been sold	12,500
Mary Pat McCarthy	Director	August 22, 2023	August 23, 2024 or when all shares have been sold	4,000

No other officers or directors, as defined in Rule 16a-1(f), adopted, modified and/or terminated a "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," as defined in Regulation S-K Item 408, during the first quarter of fiscal 2024.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
31.1	Certification of the Chief Executive Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.				
31.2	Certification of the Chief Financial Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.				
32.1 [†]	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2 [†]	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101	The following financial information from Palo Alto Networks, Inc.'s Quarterly Report on Form 10-Q for the three months ended October 31, 2023 formatted in Inline XBRL includes: (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations, (iii) Condensed Consolidated Statements of Comprehensive Income (Loss), (iv) Condensed Consolidated Statements of Stockholders' Equity, (v) Condensed Consolidated Statements of Cash Flows, and (vi) Notes to the Condensed Consolidated Financial Statements.				
104	Cover Page Interactive Data File—(formatted as Inline XBRL and contained in Exhibit 101).				

[†] The certifications attached as Exhibit 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Palo Alto Networks, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

Signatures

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

Date: November 17, 2023

PALO ALTO NETWORKS, INC.

By: /s/ DIPAK GOLECHHA

Dipak Golechha

Chief Financial Officer

(Duly Authorized Officer and Principal Financial Officer)

Date: November 17, 2023

PALO ALTO NETWORKS, INC.

By: /s/ JOSH PAUL

Josh Paul

Chief Accounting Officer

(Duly Authorized Officer and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO SECTION 302(a)
OF THE SARBANES-OXLEY ACT OF 2002**

I, Nikesh Arora, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Palo Alto Networks, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ NIKESH ARORA

Nikesh Arora

Chief Executive Officer and Director

Date: November 17, 2023

**CERTIFICATION PURSUANT TO SECTION 302(a)
OF THE SARBANES-OXLEY ACT OF 2002**

I, Dipak Golechha, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Palo Alto Networks, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ DIPAK GOLECHHA

Dipak Golechha
Chief Financial Officer

Date: November 17, 2023

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Nikesh Arora, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of Palo Alto Networks, Inc. for the quarterly period ended October 31, 2023, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Palo Alto Networks, Inc.

/s/ NIKESH ARORA

Nikesh Arora

Chief Executive Officer and Director

Date: November 17, 2023

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Dipak Golechha, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report on Form 10-Q of Palo Alto Networks, Inc. for the quarterly period ended October 31, 2023, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Palo Alto Networks, Inc.

/s/ DIPAK GOLECHHA

Dipak Golechha
Chief Financial Officer

Date: November 17, 2023