
**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, 2020

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 office, 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	New York Stock Exchange

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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>		

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.

[Table of Contents](#)

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 13, 2020 was 95,211,700.

TABLE OF CONTENTS

	Page
PART I - FINANCIAL INFORMATION	
	<u>3</u>
Item 1.	<u>5</u>
	<u>5</u>
	<u>6</u>
	<u>7</u>
	<u>8</u>
	<u>9</u>
	<u>10</u>
Item 2.	<u>24</u>
Item 3.	<u>35</u>
Item 4.	<u>35</u>
PART II - OTHER INFORMATION	
Item 1.	<u>36</u>
Item 1A.	<u>36</u>
Item 2.	<u>59</u>
Item 6.	<u>60</u>
	<u>61</u>

RISK FACTOR SUMMARY

Our business is subject to numerous risks and uncertainties, including those highlighted in Part II, Item 1A titled “Risk Factors.” These risks include, but are not limited to, the following:

- The ongoing global COVID-19 outbreak could harm our business and results of operations.
- 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 operating results may vary significantly from period to period and be unpredictable, which could cause the market price of our common stock to decline.
- The sudden and significant global economic downturn could have an adverse effect on our business and operating results.
- Our revenue growth rate in recent periods may not be indicative of our future performance.
- We have a history of losses, anticipate increasing our operating expenses in the future, and may not be able to achieve or maintain profitability or maintain or increase cash flow on a consistent basis, which could cause our business, financial condition, and operating results to suffer.
- If we are unable to sell new and additional product, subscription, and support offerings to our end-customers, our future revenue and operating results will be harmed.
- We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.
- 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.
- Reliance on shipments at the end of the quarter could cause our revenue for the applicable period to fall below expected levels.
- Seasonality may cause fluctuations in our revenue.
- If we are unable to hire, integrate, train, retain, and motivate qualified personnel and senior management, our business could suffer.
- If we are not successful in executing our strategy to increase sales of our products, subscriptions and support offerings to new and existing medium and large enterprise end-customers, our operating results may suffer.
- 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 of these subscription and support offerings are not immediately reflected in full in our 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, misuse of our products, or risks of product liability claims could harm our reputation and adversely impact our operating results.
- False detection of applications, viruses, spyware, vulnerability exploits, data patterns, or URL categories could adversely affect our business.
- 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.
- 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 market, our competitive position and prospects will be harmed.
- Our current research and development efforts may not produce successful products, subscriptions, or features that result in significant revenue, cost savings or other benefits in the near future, if at all.
- We may acquire other businesses, which could require significant management attention, disrupt our business, dilute stockholder value, and adversely affect our operating results.

- Because we depend on manufacturing partners to build and ship our 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 products and product components is complex. Insufficient supply and inventory may result in lost sales opportunities or delayed revenue, while excess inventory may harm our gross margins.
- Because some of the key components in our products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which could disrupt or delay our scheduled product deliveries to our end-customers and may result in the loss of sales and end-customers.
- The sales prices of our products and subscriptions may decrease, which may reduce our gross profits and adversely impact our financial results.
- 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 currency exchange rates, which could negatively affect our financial condition and operating results.
- We are exposed to the credit and liquidity risk of some of our channel partners and end-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.
- 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 proprietary technology or other 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.
- Our failure to adequately protect personal information could have a material adverse effect on our business.
- 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 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 have a corporate structure aligned with the international nature of our business activities, and if we do not achieve increased tax benefits as a result of our corporate structure, our financial condition and operating results could be adversely affected.
- We may not have the ability to raise the funds necessary to settle conversions of our convertible senior notes, repurchase our convertible senior notes upon a fundamental change or repay our convertible senior 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 convertible senior notes.
- Our charter documents and Delaware law, as well as certain provisions contained in the indentures governing our convertible senior notes, could discourage takeover attempts and lead to management entrenchment, which could also reduce the market price of our common stock.

PART I

ITEM 1. FINANCIAL STATEMENTS

PALO ALTO NETWORKS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in millions, except per share data)

	October 31, 2020	July 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,142.0	\$ 2,958.0
Short-term investments	1,075.6	789.8
Accounts receivable, net of allowance for credit losses of \$9.0 and \$2.3 at October 31, 2020 and July 31, 2020, respectively	675.5	1,037.1
Prepaid expenses and other current assets	407.8	344.3
Total current assets	4,300.9	5,129.2
Property and equipment, net	337.9	348.1
Operating lease right-of-use assets	251.2	258.7
Long-term investments	873.2	554.4
Goodwill	1,968.6	1,812.9
Intangible assets, net	388.8	358.2
Other assets	605.9	603.9
Total assets	\$ 8,726.5	\$ 9,065.4
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 48.5	\$ 63.6
Accrued compensation	188.4	322.2
Accrued and other liabilities	260.7	256.8
Deferred revenue	2,137.5	2,049.1
Total current liabilities	2,635.1	2,691.7
Convertible senior notes, net	3,119.2	3,084.1
Long-term deferred revenue	1,809.3	1,761.1
Long-term operating lease liabilities	323.9	336.6
Other long-term liabilities	92.0	90.1
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock; \$0.0001 par value; 100.0 shares authorized; none issued and outstanding at October 31, 2020 and July 31, 2020	—	—
Common stock and additional paid-in capital; \$0.0001 par value; 1,000.0 shares authorized; 95.2 and 96.3 shares issued and outstanding at October 31, 2020 and July 31, 2020, respectively	2,003.9	2,259.2
Accumulated other comprehensive income	3.2	10.5
Accumulated deficit	(1,260.1)	(1,167.9)
Total stockholders' equity	747.0	1,101.8
Total liabilities and stockholders' equity	\$ 8,726.5	\$ 9,065.4

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,	
	2020	2019
Revenue:		
Product	\$ 237.3	\$ 231.2
Subscription and support	708.7	540.7
Total revenue	946.0	771.9
Cost of revenue:		
Product	62.2	65.1
Subscription and support	215.6	152.6
Total cost of revenue	277.8	217.7
Total gross profit	668.2	554.2
Operating expenses:		
Research and development	237.4	170.5
Sales and marketing	388.6	365.7
General and administrative	86.7	69.8
Total operating expenses	712.7	606.0
Operating loss	(44.5)	(51.8)
Interest expense	(40.2)	(18.9)
Other income, net	2.4	16.2
Loss before income taxes	(82.3)	(54.5)
Provision for income taxes	9.9	5.1
Net loss	\$ (92.2)	\$ (59.6)
Net loss per share, basic and diluted	\$ (0.97)	\$ (0.62)
Weighted-average shares used to compute net loss per share, basic and diluted	95.5	96.6

See notes to condensed consolidated financial statements.

PALO ALTO NETWORKS, INC.

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

	Three Months Ended	
	October 31,	
	2020	2019
Net loss	\$ (92.2)	\$ (59.6)
Other comprehensive income (loss), net of tax:		
Change in unrealized gains (losses) on investments	(1.3)	2.7
Change in unrealized gains (losses) on cash flow hedges	(6.0)	0.4
Other comprehensive income (loss)	(7.3)	3.1
Comprehensive loss	\$ (99.5)	\$ (56.5)

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, 2020				
	Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of July 31, 2020	96.3	\$ 2,259.2	\$ 10.5	\$ (1,167.9)	\$ 1,101.8
Net loss	—	—	—	(92.2)	(92.2)
Other comprehensive loss	—	—	(7.3)	—	(7.3)
Issuance of common stock in connection with employee equity incentive plans	1.0	45.6	—	—	45.6
Taxes paid related to net share settlement of equity awards	—	(9.7)	—	—	(9.7)
Share-based compensation for equity-based awards	—	208.8	—	—	208.8
Repurchase and retirement of common stock	(2.1)	(500.0)	—	—	(500.0)
Balance as of October 31, 2020	95.2	\$ 2,003.9	\$ 3.2	\$ (1,260.1)	\$ 747.0

	Three Months Ended October 31, 2019				
	Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of July 31, 2019	96.8	\$ 2,490.9	\$ (3.7)	\$ (900.9)	\$ 1,586.3
Net loss	—	—	—	(59.6)	(59.6)
Other comprehensive income	—	—	3.1	—	3.1
Issuance of common stock in connection with employee equity incentive plans	1.0	36.3	—	—	36.3
Taxes paid related to net share settlement of equity awards	—	(5.3)	—	—	(5.3)
Share-based compensation for equity-based awards	—	153.7	—	—	153.7
Repurchase and retirement of common stock	(0.9)	(198.1)	—	—	(198.1)
Settlement of warrants	0.7	—	—	—	—
Balance as of October 31, 2019	97.6	\$ 2,477.5	\$ (0.6)	\$ (960.5)	\$ 1,516.4

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,	
	2020	2019
Cash flows from operating activities		
Net loss	\$ (92.2)	\$ (59.6)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Share-based compensation for equity-based awards	205.8	149.9
Depreciation and amortization	58.0	44.0
Amortization of deferred contract costs	65.8	55.6
Amortization of debt discount and debt issuance costs	35.1	15.5
Amortization of operating lease right-of-use assets	10.0	10.4
Amortization of investment premiums, net of accretion of purchase discounts	2.7	(3.2)
Changes in operating assets and liabilities, net of effects of acquisitions:		
Accounts receivable, net	382.3	83.9
Prepaid expenses and other assets	(96.9)	(59.2)
Accounts payable	(17.7)	(2.5)
Accrued compensation	(134.8)	(109.9)
Accrued and other liabilities	(20.0)	(25.2)
Deferred revenue	136.8	125.5
Net cash provided by operating activities	534.9	225.2
Cash flows from investing activities		
Purchases of investments	(829.7)	(274.3)
Proceeds from maturities of investments	198.2	632.4
Business acquisitions, net of cash acquired	(225.1)	(66.4)
Purchases of property, equipment, and other assets	(29.6)	(47.2)
Net cash provided by (used in) investing activities	(886.2)	244.5
Cash flows from financing activities		
Payments for debt issuance costs	(0.2)	—
Repurchases of common stock	(500.0)	(198.1)
Proceeds from sales of shares through employee equity incentive plans	45.4	36.3
Payments for taxes related to net settlement of equity awards	(9.7)	(5.3)
Net cash used in financing activities	(464.5)	(167.1)
Net increase (decrease) in cash, cash equivalents, and restricted cash	(815.8)	302.6
Cash, cash equivalents, and restricted cash - beginning of period	2,961.7	965.0
Cash, cash equivalents, and restricted cash - end of period	\$ 2,145.9	\$ 1,267.6
Reconciliation of cash, cash equivalents, and restricted cash to the condensed consolidated balance sheets		
Cash and cash equivalents	\$ 2,142.0	\$ 1,263.7
Restricted cash included in prepaid expenses and other current assets	2.9	1.9
Restricted cash included in other assets	1.0	2.0
Total cash, cash equivalents, and restricted cash	\$ 2,145.9	\$ 1,267.6

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”), located 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, service providers, and government entities to secure all users, applications, data, networks, and devices with comprehensive context at all times, across all locations.

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 (“GAAP”), consistent in all material respects with those applied in our Annual Report on Form 10-K for the fiscal year ended July 31, 2020, filed with the Securities and Exchange Commission (“SEC”) on September 4, 2020. Our condensed consolidated financial statements include our accounts and our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Our 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, 2020.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. We base our estimates on historical experience and also on assumptions 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 due to COVID-19.

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, 2020, as compared to the significant accounting policies described in our Annual Report on Form 10-K for the fiscal year ended July 31, 2020, except for the change in our accounting policies for credit losses due to our adoption of the new credit losses guidance. Refer to “Recently Adopted Accounting Pronouncements” below.

Recently Adopted Accounting Pronouncements***Credit Losses***

In June 2016, the Financial Accounting Standards Board (“FASB”) issued new authoritative guidance on the accounting for credit losses on most financial assets and certain financial instruments. The standard replaces the incurred loss model with an expected credit loss model for financial assets measured at amortized cost, including trade accounts receivables and financing receivables. Credit losses on available-for-sale debt securities are required to be recorded through an allowance rather than as a write-down.

We adopted this standard in our first quarter of fiscal 2021 using the modified-retrospective approach. The adoption of this standard did not have a material impact on our condensed consolidated financial statements. We updated the following accounting policies as a result of the adoption of this guidance.

Cash, Cash Equivalents, and Investments

We consider all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. Investments not considered cash equivalents, and with maturities of one year or less from the condensed consolidated balance sheet date, are classified as short-term investments. Investments with maturities greater than one year from the condensed consolidated balance sheet date are classified as long-term investments.

We classify our investments in marketable debt securities as available-for-sale at the time of purchase. When the fair value of a security is below its amortized cost, the amortized cost will be reduced to its fair value if it is more likely than not that we are required to sell the impaired security before recovery of its amortized cost basis, or we have the intention to sell the security. If neither of these conditions are met, we determine whether the impairment is due to credit losses by comparing the present value of the expected cash flows of the security with its amortized cost basis. The amount of impairment recognized is limited to the excess of the amortized cost over the fair value of the security. An allowance for credit losses for the excess of amortized cost over the expected cash flows is

recorded in other income, net in our condensed consolidated statements of operations. Impairment losses that are not credit-related are included in accumulated other comprehensive income (loss) (“AOCI”) in stockholders’ equity.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount, net of allowances for credit losses for any potential uncollectible amounts. The allowance for credit losses is based on our assessment of the collectability of accounts. Management regularly reviews the adequacy of the allowance for credit losses on a collective basis by considering the age of each outstanding invoice, each customer’s expected ability to pay and collection history, current market conditions, and reasonable and supportable forecasts of future economic conditions to determine whether the allowance is appropriate. Accounts receivable deemed uncollectible are charged against the allowance for credit losses when identified. For the three months ended October 31, 2020 and 2019, the allowance for credit losses activity was not significant.

Financing Receivables

We provide financing arrangements, primarily loans, for certain qualified end-user customers to purchase our products and services. Payment terms on these financing arrangements are generally up to three years. We evaluate our allowance for credit losses by assessing the risks and losses inherent in our financing receivables on either an individual or a collective basis. Our assessment considers various factors, including lifetime expected losses determined using customer risk profile, current economic conditions that may affect a customer’s ability to pay, and forward-looking economic considerations. Financing receivables are written off when they are considered uncollectible, and related outstanding balances are reversed and charged against the allowance for credit losses. Short-term financing receivables are included in prepaid expenses and other current assets, and long-term financing receivables are included in other assets on our condensed consolidated balance sheets. Refer to Note 5. Financing Receivables for additional information.

Recently Issued Accounting Pronouncements

Debt with Conversion Options

In August 2020, the FASB issued new authoritative guidance to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity’s own equity. The standard reduces the number of models used to account for convertible instruments, and simplifies both the classification of debt on the balance sheet and the earnings per share calculation. The standard is effective for us in our first quarter of fiscal 2023 and will be applied on a modified retrospective basis. Early adoption is permitted from our first quarter of fiscal 2022. We are currently evaluating the impact of this standard on our condensed consolidated financial statements.

2. Revenue

Disaggregation of Revenue

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

	Three Months Ended October 31,	
	2020	2019
Revenue:		
Americas		
United States	\$ 628.4	\$ 494.9
Other Americas	41.9	34.7
Total Americas	670.3	529.6
Europe, the Middle East, and Africa (“EMEA”)	170.9	147.6
Asia Pacific and Japan (“APAC”)	104.8	94.7
Total revenue	<u>\$ 946.0</u>	<u>\$ 771.9</u>

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

	Three Months Ended October 31,	
	2020	2019
Revenue:		
Product	\$ 237.3	\$ 231.2
Subscription and support		
Subscription	428.0	318.6
Support	280.7	222.1
Total subscription and support	708.7	540.7
Total revenue	\$ 946.0	\$ 771.9

Deferred Revenue

During the three months ended October 31, 2020, we recognized approximately \$630.0 million of revenue pertaining to amounts that were deferred as of July 31, 2020.

Remaining Performance Obligations

Revenue expected to be recognized from remaining performance obligations was \$4.4 billion as of October 31, 2020, of which we expect to recognize approximately \$2.3 billion over the next 12 months and the remainder thereafter.

3. Fair Value Measurements

We categorize assets and liabilities recorded or disclosed at fair value on our condensed consolidated balance sheets based upon the level of judgment associated with inputs used to measure their fair value. The categories are as follows:

- Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2—Inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments.
- Level 3—Inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value. The inputs require significant management judgment or estimation.

The following table presents the fair value of our financial assets and liabilities measured at fair value on a recurring basis using the above input categories as of October 31, 2020 and July 31, 2020 (in millions):

	October 31, 2020				July 31, 2020			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash equivalents:								
Money market funds	\$ 392.3	\$ —	\$ —	\$ 392.3	\$ 1,589.5	\$ —	\$ —	\$ 1,589.5
Certificates of deposit	—	150.0	—	150.0	—	—	—	—
U.S. government and agency securities	—	407.6	—	407.6	—	342.0	—	342.0
Total cash equivalents	392.3	557.6	—	949.9	1,589.5	342.0	—	1,931.5
Short-term investments:								
Certificates of deposit	—	31.1	—	31.1	—	26.9	—	26.9
Commercial paper	—	10.0	—	10.0	—	—	—	—
Corporate debt securities	—	169.1	—	169.1	—	100.2	—	100.2
U.S. government and agency securities	—	827.3	—	827.3	—	645.6	—	645.6
Non-U.S. government and agency securities	—	38.1	—	38.1	—	17.1	—	17.1
Total short-term investments	—	1,075.6	—	1,075.6	—	789.8	—	789.8
Long-term investments:								
Certificates of deposit	—	—	—	—	—	5.0	—	5.0
Corporate debt securities	—	162.9	—	162.9	—	91.7	—	91.7
U.S. government and agency securities	—	667.2	—	667.2	—	447.4	—	447.4
Non-U.S. government and agency securities	—	43.1	—	43.1	—	10.3	—	10.3
Total long-term investments	—	873.2	—	873.2	—	554.4	—	554.4
Prepaid expenses and other current assets:								
Foreign currency forward contracts	—	9.2	—	9.2	—	13.6	—	13.6
Total prepaid expenses and other current assets	—	9.2	—	9.2	—	13.6	—	13.6
Other assets:								
Foreign currency forward contracts	—	—	—	—	—	1.4	—	1.4
Total other assets:	—	—	—	—	—	1.4	—	1.4
Total assets measured at fair value	\$ 392.3	\$ 2,515.6	\$ —	\$ 2,907.9	\$ 1,589.5	\$ 1,701.2	\$ —	\$ 3,290.7

Refer to Note 10. Debt for the carrying amount and estimated fair value of our convertible senior notes as of October 31, 2020 and July 31, 2020.

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, 2020 and July 31, 2020 (in millions):

	October 31, 2020			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Certificates of deposit	\$ 150.0	\$ —	\$ —	\$ 150.0
U.S. government and agency securities	407.6	—	—	407.6
Total available-for-sale cash equivalents	<u>\$ 557.6</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 557.6</u>
Investments:				
Certificates of deposit	\$ 31.1	\$ —	\$ —	\$ 31.1
Commercial paper	10.0	—	—	10.0
Corporate debt securities	330.7	1.3	—	332.0
U.S. government and agency securities	1,492.6	2.0	(0.1)	1,494.5
Non-U.S. government securities	81.2	—	—	81.2
Total available-for-sale investments	<u>\$ 1,945.6</u>	<u>\$ 3.3</u>	<u>\$ (0.1)</u>	<u>\$ 1,948.8</u>

	July 31, 2020			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
U.S. government and agency securities	\$ 342.0	\$ —	\$ —	\$ 342.0
Total available-for-sale cash equivalents	<u>\$ 342.0</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 342.0</u>
Investments:				
Certificates of deposit	\$ 31.9	\$ —	\$ —	\$ 31.9
Corporate debt securities	190.1	1.8	—	191.9
U.S. government and agency securities	1,090.3	2.8	(0.1)	1,093.0
Non-U.S. government and agency securities	27.4	—	—	27.4
Total available-for-sale investments	<u>\$ 1,339.7</u>	<u>\$ 4.6</u>	<u>\$ (0.1)</u>	<u>\$ 1,344.2</u>

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, 2020.

The following table summarizes the amortized cost and fair value of our available-for-sale debt securities as of October 31, 2020, by contractual years-to-maturity (in millions):

	Amortized Cost	Fair Value
Due within one year	\$ 1,631.7	\$ 1,633.2
Due between one and three years	871.5	873.2
Total	<u>\$ 2,503.2</u>	<u>\$ 2,506.4</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, 2020 and July 31, 2020, the carrying value of our marketable equity securities were \$392.3 million and \$1.6 billion, respectively. There were no unrealized gains or losses recognized for these securities during the three months ended October 31, 2020 and 2019.

5. Financing Receivables

We provide financing arrangements, primarily loans, for certain qualified end-user customers to purchase our products. The following table summarizes our short-term and long-term financing receivables as of October 31, 2020 (in millions):

	October 31, 2020
Short-term financing receivables, gross	\$ 11.2
Allowance for credit losses	(0.2)
Short-term financing receivables, net	<u>\$ 11.0</u>
Long-term financing receivables, gross	\$ 9.5
Allowance for credit losses	(0.2)
Long-term financing receivables, net	<u>\$ 9.3</u>

Through July 31, 2020, financing receivables were not significant to our condensed consolidated balance sheet. There was no significant activity in allowance for credit losses during the three months ended October 31, 2020. There were no past due amounts on financing receivables as of October 31, 2020 and July 31, 2020.

6. Derivative Instruments

As a global business, we are exposed to currency exchange rate risk. Substantially all of 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 15 months or less, which we designate as cash flow hedges, to manage the foreign currency exchange rate risk associated with these expenditures.

As of October 31, 2020 and July 31, 2020, the total notional amount of our outstanding foreign currency forward contracts was \$386.7 million and \$443.6 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, 2020.

During the three months ended October 31, 2020 and 2019, both unrealized gains and losses recognized in AOCI related to our cash flow hedges and amounts reclassified into earnings were not material. Unrealized gains and losses in AOCI related to our cash flow hedges as of October 31, 2020 and 2019 were not material.

7. Acquisition

The Crypsis Group

On September 17, 2020, we completed our acquisition of The Crypsis Group (“Crypsis”), an incident response, risk management, and digital forensics consulting firm. We believe the acquisition will expand our capabilities and strengthen our Cortex strategy. The total purchase consideration for the acquisition of Crypsis was \$227.7 million, which consisted of the following (in millions):

	Amount
Cash	\$ 225.7
Fair value of replacement awards	2.0
Total	<u>\$ 227.7</u>

As part of the acquisition, we issued \$27.1 million of replacement awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 157.6
Identified intangible assets	54.4
Net assets acquired	15.7
Total	<u>\$ 227.7</u>

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Crypsis technology into our platforms. The goodwill is deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 6.9	3 years
Customer relationships	47.5	7 years
Total	<u>\$ 54.4</u>	

Additional Acquisition-Related Information

The operating results of the acquired company are included in our condensed consolidated statement of operations from the date of acquisition. Pro forma results of operations have not been presented because the effects of the acquisition were not material to our condensed consolidated statements of operations.

Additional information related to the acquired company, such as that related to income tax and other contingencies, existing as of the acquisition date but unknown to us, may become known during the remainder of the measurement period, not to exceed 12 months from the acquisition date, which may result in changes to the amounts and allocations recorded.

8. Goodwill and Intangible Assets

Goodwill

The following table presents details of our goodwill during the three months ended October 31, 2020 (in millions):

	Amount
Balance as of July 31, 2020	\$ 1,812.9
Goodwill acquired	157.6
Measurement period adjustment	(1.9)
Balance as of October 31, 2020	<u>\$ 1,968.6</u>

Purchased Intangible Assets

The following table presents details of our purchased intangible assets as of October 31, 2020 and July 31, 2020 (in millions):

	October 31, 2020			July 31, 2020		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets subject to amortization:						
Developed technology	\$ 432.6	\$ (166.6)	\$ 266.0	\$ 425.9	\$ (146.6)	\$ 279.3
Customer relationships	134.0	(14.6)	119.4	87.6	(12.4)	75.2
Acquired intellectual property	6.3	(3.3)	3.0	6.3	(3.2)	3.1
Trade name and trademarks	9.4	(9.4)	—	9.4	(9.4)	—
Other	2.8	(2.4)	0.4	3.1	(2.5)	0.6
Total purchased intangible assets	<u>\$ 585.1</u>	<u>\$ (196.3)</u>	<u>\$ 388.8</u>	<u>\$ 532.3</u>	<u>\$ (174.1)</u>	<u>\$ 358.2</u>

We recognized amortization expense of \$23.6 million and \$16.9 million for the three months ended October 31, 2020 and 2019, respectively.

The following table summarizes estimated future amortization expense of our intangible assets as of October 31, 2020 (in millions):

	Amount
Fiscal years ending July 31:	
Remaining 2021	\$ 74.1
2022	94.3
2023	68.2
2024	58.2
2025	44.5
2026 and thereafter	49.5
Total future amortization expense	<u>\$ 388.8</u>

9. Deferred Contract Costs

The following table presents details of our short-term and long-term deferred contract costs as of October 31, 2020 and July 31, 2020 (in millions):

	October 31, 2020	July 31, 2020
Short-term deferred contract costs	\$ 213.0	\$ 206.0
Long-term deferred contract costs	408.8	422.3
Total deferred contract costs	<u>\$ 621.8</u>	<u>\$ 628.3</u>

We recognized amortization expense for our deferred contract costs of \$65.8 million and \$55.6 million during the three months ended October 31, 2020 and 2019, respectively. We did not recognize any impairment losses on our deferred contract costs during the three months ended October 31, 2020 or 2019.

10. 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 bear interest at a fixed rate of 0.75% per year, payable semi-annually in arrears on January 1 and July 1 of each year, beginning on January 1, 2019. 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. Each series of the convertible notes is governed by an indenture between us, as the issuer, and U.S. Bank National Association, as Trustee (individually, each an "Indenture," and together, the "Indentures"). The Notes of each series are unsecured, unsubordinated obligations and the applicable Indenture governing each series of 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 2023 Notes and the 2025 Notes mature on July 1, 2023 and June 1, 2025, respectively. We cannot redeem the 2023 Notes prior to maturity. 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 following table presents details of our Notes (number of shares in millions):

	Conversion Rate per \$1,000 Principal	Initial Conversion Price	Convertible Date	Initial Number of Shares
2023 Notes	3.7545	\$ 266.35	April 1, 2023	6.4
2025 Notes	3.3602	\$ 297.60	March 1, 2025	6.7

Holders of the Notes may surrender their Notes for conversion at their option at any time prior to the close of business on the business day immediately preceding their respective convertible dates only under the following circumstances:

- during any fiscal quarter commencing after the fiscal quarters ending on October 31, 2018 and October 31, 2020 for the 2023 Notes and the 2025 Notes, respectively (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 applicable conversion price for the respective 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 applicable series of 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 applicable conversion rate for the respective Notes on each such trading day; or
- upon the occurrence of specified corporate events.

On or after the respective convertible date, holders may surrender all or any portion of their Notes for conversion at any time prior to the close of business on the second scheduled trading day immediately preceding the applicable maturity date regardless of the foregoing conditions, and such conversions will be settled upon the applicable maturity date. Upon conversion, holders of the Notes of a series will receive cash equal to the aggregate principal amount of the Notes of such series 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 Notes of such series being converted.

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

The sale price condition was not met for the Notes during the fiscal quarters ended October 31, 2020 or July 31, 2020. Since the Notes were not convertible, the net carrying amount of the Notes was classified as a long-term liability and the equity component was included in additional paid-in capital in our condensed consolidated balance sheets in the periods presented. As of October 31, 2020, all of the Notes remained outstanding.

The following table sets forth the components of the Notes as of October 31, 2020 and July 31, 2020 (in millions):

	October 31, 2020			July 31, 2020		
	2023 Notes	2025 Notes	Total	2023 Notes	2025 Notes	Total
Liability component:						
Principal	\$ 1,693.0	\$ 2,000.0	\$ 3,693.0	\$ 1,693.0	\$ 2,000.0	\$ 3,693.0
Less: debt discount and debt issuance costs, net of amortization	183.8	390.1	573.9	200.0	408.9	608.9
Net carrying amount	<u>\$ 1,509.2</u>	<u>\$ 1,609.9</u>	<u>\$ 3,119.1</u>	<u>\$ 1,493.0</u>	<u>\$ 1,591.1</u>	<u>\$ 3,084.1</u>
Equity component	<u>\$ 315.0</u>	<u>\$ 403.0</u>	<u>\$ 718.0</u>	<u>\$ 315.0</u>	<u>\$ 403.0</u>	<u>\$ 718.0</u>

The total estimated fair value of the Notes was \$3.9 billion and \$4.1 billion at October 31, 2020 and July 31, 2020, respectively. The fair value was determined based on the closing trading price per \$100 of the Notes as of the last day of trading for the period. We consider the fair value of the Notes at October 31, 2020 and July 31, 2020 to be a Level 2 measurement. The fair value of the Notes is primarily affected by the trading price of our common stock and market interest rates. Based on the closing price of our common stock on October 31, 2020, the if-converted value of the Notes was less than its respective principal amount.

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

	Three Months Ended October 31,				
	2020			2019	
	2023 Notes	2025 Notes	Total	2023 Notes	Total
Contractual interest expense	\$ 3.2	\$ 1.9	\$ 5.1	\$ 3.2	\$ 3.2
Amortization of debt discount	15.7	18.2	33.9	15.0	15.0
Amortization of debt issuance costs	0.5	0.7	1.2	0.5	0.5
Total interest expense recognized	\$ 19.4	\$ 20.8	\$ 40.2	\$ 18.7	\$ 18.7
Effective interest rate of the liability component	5.2 %	5.4 %		5.2 %	

Note Hedges

To minimize the impact of potential economic dilution upon conversion of our 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 Notes 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.

The following table presents details of our Note Hedges (in millions):

	Initial Number of Shares	Aggregate Purchase
2023 Note Hedges	6.4	\$ 332.0
2025 Note Hedges	6.7	\$ 370.8

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

Warrants

Separately, but concurrently with the issuance of each series of our 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 beginning October 2023 and September 2025, respectively.

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

	Initial Number of Shares	Strike Price per Share	Aggregate Proceeds
2023 Warrants	6.4	\$ 417.80	\$ 145.4
2025 Warrants	6.7	\$ 408.47	\$ 202.8

The shares issuable under the Warrants will be 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 in our condensed consolidated balance sheets.

Revolving Credit Facility

On September 4, 2018, 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 the earlier of (i) September 4, 2023 and (ii) the date that is 91 days prior to the stated maturity of our 2023 Notes if (a) any of the 2023 Notes are

still outstanding and (b) our unrestricted cash and cash equivalents are less than the then outstanding principal amount of our 2023 Notes plus \$400.0 million.

The borrowings under the Credit Facility currently bear interest, at our option, at a base rate plus a spread of 0.00% to 0.75%, or an adjusted LIBO Rate plus a spread of 1.00% to 1.75%, 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 0.125% to 0.250%, depending on our leverage ratio. Regulatory authorities that oversee financial markets have announced that after the end of 2021, they would no longer compel banks currently reporting information used to set the LIBO Rate to continue to make rate submissions. As a result, it is possible that beginning in 2022, the LIBO Rate will no longer be available as a reference rate. Under the terms of our Credit Facility, in the event of the discontinuance of the LIBO Rate, a mutually agreed-upon alternative benchmark rate will be established to replace the LIBO Rate, which may include the Secured Overnight Financing Rate (“SOFR”). We do not anticipate that the discontinuance of the LIBO Rate will materially impact our liquidity or financial position.

As of October 31, 2020, there were no amounts outstanding and we were in compliance with all covenants under the Credit Agreement.

11. Commitments and Contingencies

Purchase Commitments

Manufacturing Purchase Commitments

Our electronics manufacturing service provider (“EMS provider”) procures components and assembles our products based on our forecasts. These forecasts are based on estimates of demand for our products primarily for the next 12 months, which are in turn based on historical trends and an analysis from our sales and product management organizations, adjusted for overall market conditions. In order to reduce manufacturing lead times and plan for adequate supply, we may issue non-cancelable orders for products and components to our manufacturing partners or component suppliers. As of October 31, 2020, our purchase commitments under such orders were \$140.8 million excluding obligations under contracts that we can cancel without a significant penalty.

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 through the year ending July 31, 2026. The following table presents details of the aggregate future non-cancelable purchase commitments under these agreements as of October 31, 2020 (in millions):

	Amount
Fiscal years ending July 31:	
Remaining 2021	\$ —
2022	159.2
2023	227.2
2024	285.7
2025	345.3
2026 and thereafter	551.1
Total other purchase commitments	<u>\$ 1,568.5</u>

Litigation

We are subject to legal proceedings, claims, and litigation arising in the ordinary course of business, including intellectual property litigation. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. We accrue for contingencies when we believe that a loss is probable and that we can reasonably estimate the amount of any such loss.

To the extent there is a reasonable possibility that a loss exceeding amounts already recognized may be incurred and the amount of such additional loss would be material, we will either disclose the estimated additional loss or state that such an estimate cannot be made. As of October 31, 2020, we have not recorded any significant accruals for loss contingencies associated with such legal proceedings, determined that an unfavorable outcome is probable or reasonably possible, or determined that the amount or range of any possible loss is reasonably estimable.

12. 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. 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. This repurchase authorization will expire on December 31, 2020 and may be suspended or discontinued at any time.

During the three months ended October 31, 2020, we repurchased and retired 2.1 million shares of our common stock under the authorization for an aggregate purchase price of \$500.0 million, including transaction costs. 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. As of October 31, 2020, \$301.9 million remained available for future share repurchases under our current repurchase authorization.

13. Equity Award Plans

Assumed Share-based Compensation Plans

The Crypsis Group Stock Incentive Plan

In connection with our acquisition of Crypsis in September 2020, we assumed the Crypsis Group Holdings, LLC 2017 Equity Incentive Plan (the “Crypsis Group Plan”), under which the assumed Crypsis equity awards were granted. The assumed equity awards will be settled in shares of our common stock and will retain the terms and conditions under which they were originally granted; forfeited awards will not be returned to the Crypsis Group Plan. No additional equity awards will be granted under the Crypsis Group Plan. Refer to Note 7. Acquisition for more information on our Crypsis acquisition and the related equity awards assumed.

Performance Stock Option (“PSO”) Activities

There was no PSO activity under our stock plans during the three months ended October 31, 2020. As of October 31, 2020, we had 2.8 million shares of PSO outstanding and exercisable with a weighted-average exercise price per share of \$194.14, a weighted-average remaining contract term of 4.9 years, and an aggregate intrinsic value of \$74.8 million.

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 reporting period (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, 2020	6.6	\$ 203.30	\$ 1,688.1	0.6	\$ 231.42	\$ 147.2
Granted	1.8	\$ 241.67		0.4	\$ 244.15	
Vested	(0.8)	\$ 187.16		(0.1)	\$ 210.57	
Forfeited	(0.2)	\$ 207.01		—	\$ 229.47	
Balance—October 31, 2020	7.4	\$ 213.78	\$ 1,644.1	0.9	\$ 238.35	\$ 196.2

Our PSUs generally vest over a period of one to four years from the date of grant. The actual number of PSUs earned and eligible to vest is determined based on the level of achievement against revenue growth, pre-established billings and operating margin goals, or pre-defined individual performance targets for the fiscal year. We recognize share-based compensation expense for our PSUs on a straight-line basis over the requisite service period for each separately vesting portion of the award when it is probable that the performance condition will be achieved.

Share-Based Compensation

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

	Three Months Ended October 31,	
	2020	2019
Cost of product revenue	\$ 1.5	\$ 1.3
Cost of subscription and support revenue	22.2	18.9
Research and development	95.4	62.4
Sales and marketing	64.9	43.8
General and administrative	28.9	24.8
Total share-based compensation	\$ 212.9	\$ 151.2

During the three months ended October 31, 2020, we accelerated the vesting of certain equity awards in connection with our acquisition; as a result, we recorded \$7.1 million of share-based compensation within general and administrative expense in our condensed consolidated statements of operations.

As of October 31, 2020, total compensation cost related to unvested share-based awards not yet recognized was \$1.8 billion. This cost is expected to be amortized over a weighted-average period of approximately 2.7 years. Future grants will increase the amount of compensation expense to be recorded in these periods.

14. Income Taxes

For the three months ended October 31, 2020, our provision for income taxes reflects an effective tax rate of negative 12.0%. Our effective tax rate for the three months ended October 31, 2020 was negative as we recorded a provision for income taxes on year-to-date losses. The provision for income taxes for the three months ended October 31, 2020 was primarily due to income taxes in profitable foreign jurisdictions and withholding taxes. Our effective tax rate differs from the U.S. statutory tax rate primarily due to changes in our valuation allowance.

Our provision for income taxes for the three months ended October 31, 2019 reflects an effective tax rate of negative 9.4%. Our effective tax rate for the three months ended October 31, 2019 was negative as we recorded a provision for income taxes on year-to-date losses. The provision for income taxes for the three months ended October 31, 2019 was primarily due to income taxes in profitable foreign jurisdictions, U.S. state taxes, and withholding taxes. Our effective tax rate differs from the U.S. statutory tax rate primarily due to deductibility of our share-based compensation, foreign income at other than U.S. tax rates, and changes in our valuation allowance.

15. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by basic weighted-average shares outstanding during the period. Diluted net loss per share is computed by dividing net loss by diluted weighted-average shares outstanding, including potentially dilutive securities.

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

	Three Months Ended October 31,	
	2020	2019
Net loss	\$ (92.2)	\$ (59.6)
Weighted-average shares used to compute net loss per share, basic and diluted	95.5	96.6
Net loss per share, basic and diluted	\$ (0.97)	\$ (0.62)

The following securities were excluded from the computation of diluted net loss per share of common stock for the periods presented as their effect would have been antidilutive (in millions):

	Three Months Ended October 31,	
	2020	2019
Convertible senior notes	13.1	6.4
Warrants related to the issuance of convertible senior notes	13.1	9.6
RSUs and PSUs	8.3	7.7
Options to purchase common stock, including PSOs	2.8	3.2
Restricted stock awards and performance-based stock awards	—	0.1
ESPP shares	0.1	0.1
Total	37.4	27.1

16. Other Income, Net

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

	Three Months Ended	
	October 31,	
	2020	2019
Interest income	\$ 2.9	\$ 15.8
Foreign currency exchange gains (losses), net	2.1	0.4
Other	(2.6)	—
Total other income, net	\$ 2.4	\$ 16.2

17. Subsequent Events***Business Combinations***

In November 2020, we entered into a definitive agreement to acquire Expanse Inc. (“Expanse”), a privately-held company specializing in attack surface management, for total consideration of approximately \$800 million, including approximately \$670 million in cash and common stock, and approximately \$130 million in replacement equity awards, subject to adjustment. We expect the acquisition will enrich our Cortex offerings and enable organizations an integrated view of the enterprise to combine external, internal, and threat data. The acquisition is expected to close during our second quarter of fiscal 2021.

In November 2020, we entered into a definitive agreement to acquire Sinefa Group, Inc. and its wholly owned subsidiaries (“Sinefa”), a privately-held digital experience monitoring company, for total consideration of approximately \$44 million in cash, subject to adjustment. We expect the acquisition will extend our Prisma Access offering. The acquisition is expected to close during our second quarter of fiscal 2021.

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. The following discussion and analysis contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements include, among other things: expectations regarding drivers of and factors affecting growth in our business; the performance advantages of our products and subscription and support offerings and the potential benefits to our customers; statements regarding trends in billings, 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; expectations regarding our revenues, including the seasonality and cyclicity from quarter to quarter; expectations and intentions with respect to the products and technologies that we acquire and introduce; our strategy of acquiring complementary businesses and our ability to successfully acquire and integrate businesses and technologies, including closing the proposed Sinefa and Expanse acquisitions; expected recurring revenues resulting from expected growth in our installed base and increased adoption of our products and cloud-based subscription services; the sufficiency of our existing cash and investments to meet our cash needs for the foreseeable future; our intentions to sell any of our available-for-sale debt instruments; our expectations regarding the impact of the discontinuance of the LIBO Rate upon our liquidity or financial position; the timing and amount of sublease income, capital expenditures and share repurchases; expectations to increase customer financing activities in the future; expectations regarding the potential impacts of the outbreak of the coronavirus disease in 2019 ("COVID-19") and related public health measures on our business, the business of our customers, suppliers and channel partners, and the economy; 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 "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "predicts," "projects," "would," "will be," "will continue," "will likely result," and similar expressions. 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 generally accepted accounting principles ("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, 2020 to the three months ended October 31, 2019.
- **Liquidity and Capital Resources.** An analysis of changes in 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.
- **Recent Accounting Pronouncements.** A discussion of expected impacts of impending accounting changes on financial information to be reported in the future.

Overview

We empower enterprises, service providers, and government entities to secure all users, applications, data, networks and devices with comprehensive visibility and context continuously across all locations. We deliver cybersecurity products covering a broad range of use cases, enabling our end-customers to secure their networks, remote workforce, access to the service edge, branch locations, public and private clouds, and to advance their Security Operations Centers ("SOC"). We believe our portfolio offers advanced prevention and security, while reducing the total cost of ownership for organizations by improving operational efficiency and eliminating the need for siloed point products. We do this with solutions focused on delivering value in three fundamental areas:

Secure the Enterprise:

- Secure the network through our ML-powered Next-Generation Firewalls, available in a number of form factors, including physical, virtual, and containerized appliances, as well as a cloud-delivered service. This also includes our add-on Cloud-delivered Security Services ("Security Services"), such as Threat Prevention, WildFire, URL Filtering, DNS Security, IoT Security, GlobalProtect, SD-WAN, and Enterprise Data Loss Prevention that secure applications, users,

and devices across our ML-powered Next-Generation Firewalls, Prisma, and Cortex product lines. Panorama, our network security management solution, available as hardware or virtual machine, can centrally manage all of our firewalls irrespective of their form factor, location, or scale.

Secure the Cloud:

- Secure the cloud through our Prisma security offerings. Prisma Cloud, the industry's most comprehensive Cloud Native Security Platform ("CNSP"), secures multi- and hybrid-cloud environments and cloud native applications integrating security across the full deployment lifecycle. Prisma SaaS protects SaaS applications. Prisma Access, a comprehensive Secure Access Service Edge ("SASE") offering, together with CloudGenix SD-WAN, is used to secure remote work forces and enable the cloud-delivered branch. CloudGenix SD-WAN autonomous networking and integrated security is available as a combination of physical, virtual, and cloud-delivered appliances and services. VM-Series and CN-Series enforces in-line network security in multi- and hybrid- cloud environments.

Secure the Future:

- Secure the future through our Cortex security offerings, which includes Cortex XDR for prevention, detection, and response platforms to stop modern security attacks, Cortex XSOAR for security orchestration, automation, and response ("SOAR"), Autofocus for threat intelligence, and Cortex Data Lake to collect and integrate security data for analytics. These products are delivered as software or SaaS subscriptions. In addition, Crypsis provides incident response, risk management, and digital forensics services to help and protect our customers.

For the first quarter of fiscal 2021 and 2020, total revenue was \$946.0 million and \$771.9 million, respectively, representing year-over-year growth of 22.6%. 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 as we continue to grow our installed end-customer base. As of October 31, 2020, we had end-customers in more than 170 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 some of the largest Fortune 100 and Global 2000 companies in the world. We maintain a field sales force that works closely with our channel partners in developing sales opportunities. We 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 was \$237.3 million, or 25.1% of total revenue, for the first quarter of fiscal 2021, representing year-over-year growth of 2.6%. Product revenue is generated from sales of our appliances, primarily our ML-powered Next-Generation Firewall, which is available in a number of form factors, including as physical, virtual, and containerized appliances. Our ML-powered Next-Generation Firewall incorporates our PAN-OS operating system, which provides a consistent set of capabilities across our entire product line. Our products are designed for different performance requirements throughout an organization, ranging from our PA-220, 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 \$708.7 million, or 74.9% of total revenue, for the first quarter of fiscal 2021, representing year-over-year growth of 31.1%. Our subscriptions provide our end-customers with near real-time access to the latest antivirus, intrusion prevention, web filtering, and modern malware prevention capabilities across the network, endpoints, and the cloud. When end-customers purchase our physical, virtual, or container firewall appliances, 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 platforms, 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 September 2020, we acquired The Crypsis Group ("Crypsis"), which we believe will expand our capabilities and strengthen our Cortex strategy.

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 COVID-19 on Our Business

We are actively monitoring, evaluating, and responding to developments relating to COVID-19, which has and is expected to result in continued significant global, social, and business disruption. While we instituted a global work-from-home policy beginning in March 2020, we did not incur significant disruptions in our work operations during the first quarter of fiscal 2021. We are conducting business as usual with restrictions to employee travel and transitioning of in-person marketing events to virtual formats, among other modifications. These changes will substantially remain in effect in the second quarter of fiscal 2021, and are likely to extend to future quarters. We will continue to actively monitor the situation and will make further changes to our business operations as may be required by federal, state, or local authorities or that we determine are in the best interests of our employees, end-customers, partners, suppliers, and stockholders. Our focus remains on the safety of our employees, striving to protect the health and well-being of the communities in which we operate, and providing technology to our employees, end-customers, and partners to help them do their best work while remote.

Although some end-customers adopted Prisma Access as their secure work-from-home solution for the longer term, COVID-19 may curtail our end-customers' spending and could lead them to delay or defer purchasing decisions, and lengthen sales cycles and payment terms, which could materially adversely impact our business, results of operations, and overall financial performance. Also, certain of our end-customers or partners may be or may become credit or cash constrained, making it difficult for them to fulfill their payment obligations to us. The extent of the impact of COVID-19 on our operational and financial performance will depend on developments, including the duration and spread of the virus, impact on our end-customers' spending, volume of sales and length of our sales cycles, impact on our partners, suppliers, and employees, actions that may be taken by governmental authorities, and other factors identified in Part II, Item 1A "Risk Factors" in this Form 10-Q. Given the dynamic nature of these circumstances, the full impact of COVID-19 on our ongoing business, results of operations, and overall financial performance cannot be reasonably estimated at this time.

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 loss and margin below under "— Results of Operations."

	October 31, 2020	July 31, 2020
	(in millions)	
Total deferred revenue	\$ 3,946.8	\$ 3,810.2
Cash, cash equivalents, and investments	\$ 4,090.8	\$ 4,302.2

	Three Months Ended October 31,	
	2020	2019
	(dollars in millions)	
Total revenue	\$ 946.0	\$ 771.9
Total revenue year-over-year percentage increase	22.6 %	17.7 %
Gross margin	70.6 %	71.8 %
Operating loss	\$ (44.5)	\$ (51.8)
Operating margin	(4.7)%	(6.7)%
Billings	\$ 1,082.8	\$ 897.4
Billings year-over-year percentage increase	20.7 %	18.3 %
Cash flow provided by operating activities	\$ 534.9	\$ 225.2
Free cash flow (non-GAAP)	\$ 505.3	\$ 178.0

- **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 given our hybrid SaaS revenue model, and 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 shipment, 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,	
	2020	2019
(in millions)		
Billings:		
Total revenue	\$ 946.0	\$ 771.9
Add: change in total deferred revenue, net of acquired deferred revenue	136.8	125.5
Billings	<u>\$ 1,082.8</u>	<u>\$ 897.4</u>

- **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 depreciation, amortization, and share-based compensation costs, 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 GAAP, is provided below:

	Three Months Ended October 31,	
	2020	2019
(in millions)		
Free cash flow (non-GAAP):		
Net cash provided by operating activities	\$ 534.9	\$ 225.2
Less: purchases of property, equipment, and other assets	29.6	47.2
Free cash flow (non-GAAP)	<u>\$ 505.3</u>	<u>\$ 178.0</u>
Net cash provided by (used in) investing activities	<u>\$ (886.2)</u>	<u>\$ 244.5</u>
Net cash used in financing activities	<u>\$ (464.5)</u>	<u>\$ (167.1)</u>

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,			
	2020		2019	
	Amount	% of Revenue	Amount	% of Revenue
(dollars in millions)				
Revenue:				
Product	\$ 237.3	25.1 %	\$ 231.2	30.0 %
Subscription and support	708.7	74.9 %	540.7	70.0 %
Total revenue	946.0	100.0 %	771.9	100.0 %
Cost of revenue:				
Product	62.2	6.6 %	65.1	8.4 %
Subscription and support	215.6	22.8 %	152.6	19.8 %
Total cost of revenue ⁽¹⁾	277.8	29.4 %	217.7	28.2 %
Total gross profit	668.2	70.6 %	554.2	71.8 %
Operating expenses:				
Research and development	237.4	25.1 %	170.5	22.1 %
Sales and marketing	388.6	41.0 %	365.7	47.4 %
General and administrative	86.7	9.2 %	69.8	9.0 %
Total operating expenses ⁽¹⁾	712.7	75.3 %	606.0	78.5 %
Operating loss	(44.5)	(4.7)%	(51.8)	(6.7)%
Interest expense	(40.2)	(4.2)%	(18.9)	(2.4)%
Other income, net	2.4	0.2 %	16.2	2.0 %
Loss before income taxes	(82.3)	(8.7)%	(54.5)	(7.1)%
Provision for income taxes	9.9	1.0 %	5.1	0.6 %
Net loss	\$ (92.2)	(9.7)%	\$ (59.6)	(7.7)%

(1) Includes share-based compensation as follows:

	Three Months Ended October 31,	
	2020	2019
	(in millions)	
Cost of product revenue	\$ 1.5	\$ 1.3
Cost of subscription and support revenue	22.2	18.9
Research and development	95.4	62.4
Sales and marketing	64.9	43.8
General and administrative	28.9	24.8
Total share-based compensation	\$ 212.9	\$ 151.2

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 primarily from sales of our appliances. Product revenue also includes revenue derived from software licenses of Panorama and the VM-Series. Our appliances and software licenses include a broad set of built-in networking and security features and functionalities. We generally recognize product revenue at the time of hardware shipment or delivery of software licenses.

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Product	\$ 237.3	\$ 231.2	\$ 6.1	2.6 %

The change in product revenue for the three months ended October 31, 2020 compared to the same period in 2019 represented a modest increase in product sales.

Subscription and Support Revenue

Subscription and support revenue is derived primarily from sales of our subscription and support offerings. Our contractual 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 to 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,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Subscription	\$ 428.0	\$ 318.6	\$ 109.4	34.3 %
Support	280.7	222.1	58.6	26.4 %
Total subscription and support	\$ 708.7	\$ 540.7	\$ 168.0	31.1 %

Subscription and support revenue increased for the three months ended October 31, 2020 compared to the same period in 2019. The increase was due to increased demand for our subscription and support offerings from both new and existing 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. The change in subscription and support revenue due to changes in pricing was not significant.

Revenue by Geographic Theater

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Americas	\$ 670.3	\$ 529.6	\$ 140.7	26.6 %
EMEA	170.9	147.6	23.3	15.8 %
APAC	104.8	94.7	10.1	10.7 %
Total revenue	\$ 946.0	\$ 771.9	\$ 174.1	22.6 %

With respect to geographic theaters, the increase in revenue for the three months ended October 31, 2020 compared to the same period in 2019 was driven primarily by the Americas, due to its larger and more established sales force. Revenue from our other geographic theaters, both Europe, the Middle East, and Africa (“EMEA”) and Asia Pacific and Japan (“APAC”), increased for the three months ended October 31, 2020 compared to the same period in 2019 due to continued investment in our global sales force in order to support our growth and innovation.

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. Our cost of product revenue also includes personnel costs, which consist of salaries, benefits, bonuses, share-based compensation, and travel and entertainment associated with our operations organization, amortization of intellectual property licenses, product testing costs, shipping and tariff costs, and allocated costs. Allocated 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 product revenue.

	Three Months Ended October 31,				
	2020		2019		Change
	Amount	Amount	Amount	%	
	(dollars in millions)				
Cost of product revenue	\$ 62.2	\$ 65.1	\$ (2.9)	(4.5)%	
Number of employees at period end	114	108	6	5.6 %	

Cost of product revenue decreased slightly for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to product mix.

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 allocated 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,				
	2020		2019		Change
	Amount	Amount	Amount	%	
	(dollars in millions)				
Cost of subscription and support revenue	\$ 215.6	\$ 152.6	\$ 63.0	41.3 %	
Number of employees at period end	1,569	1,288	281	21.8 %	

Cost of subscription and support revenue increased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to increased costs to support the growth of our subscription and support offerings. Cloud hosting service costs, which support the adoption of our cloud-based subscription offerings, increased \$26.2 million for the three months ended October 31, 2020 compared to the same period in 2019. Personnel costs grew \$13.7 million to \$87.6 million for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to headcount growth. The remaining increase was primarily due to increases in outside service costs and amortization of internally developed software.

Gross Margin

Gross margin, or gross profit as a percentage of revenue, has been and will continue to be affected by a variety of factors, including the introduction of new products, manufacturing costs, tariff 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. For sales of our products, our 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 fluctuate over time depending on the factors described above.

	Three Months Ended October 31,			
	2020		2019	
	Amount	Gross Margin	Amount	Gross Margin
	(dollars in millions)			
Product	\$ 175.1	73.8 %	\$ 166.1	71.8 %
Subscription and support	493.1	69.6 %	388.1	71.8 %
Total gross profit	<u>\$ 668.2</u>	<u>70.6 %</u>	<u>\$ 554.2</u>	<u>71.8 %</u>

Product gross margin increased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to product mix.

Subscription and support gross margin decreased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to an increase in costs to support our cloud-based subscription offerings.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expense. 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 allocated costs, which consist of certain facilities, depreciation, benefits, recruiting, and information technology costs that we allocate based on headcount. 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. In response to COVID-19, we instituted a global work-from-home policy and limited employee travel beginning in March 2020. Further, we have canceled in-person events and either replaced them with virtual events or postponed them to future periods. As of October 31, 2020, we expect to recognize approximately \$1.8 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 allocated 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,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Research and development	\$ 237.4	\$ 170.5	\$ 66.9	39.2 %
Number of employees at period end	1,943	1,598	345	21.6 %

Research and development expense increased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to personnel costs, which grew \$54.8 million to \$188.0 million. The increase in personnel costs was primarily due to headcount growth and accelerated vesting of certain equity awards.

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 allocated costs. We continue to thoughtfully invest in headcount and have substantially grown our international 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 increase touch points with end-customers and to expand our international presence, although our sales and marketing expense may fluctuate as a percentage of total revenue.

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Sales and marketing	\$ 388.6	\$ 365.7	\$ 22.9	6.3 %
Number of employees at period end	3,855	3,557	298	8.4 %

Sales and marketing expense increased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to personnel costs, which grew \$30.2 million to \$293.3 million, and increased expenses for go-to-market initiatives, which were partially offset by a decrease in trade shows and convention expenses as in-person events were replaced with virtual events due to COVID-19. The increase in personnel costs was largely due to headcount growth, and partially offset by decreased travel expenses due to COVID-19.

General and Administrative

General and administrative expense consists primarily of personnel costs for our executive, finance, human resources, legal, and information technology organizations, and professional services costs, which consist primarily of legal, auditing, accounting, and other consulting costs. General and administrative expense also includes certain non-recurring general expenses and impairment losses. Certain facilities, depreciation, benefits, recruiting, and information technology costs are allocated to other organizations based on

headcount. We expect general and administrative expense to increase in absolute dollars due to additional costs associated with accounting, compliance, and insurance, although our general and administrative expense may fluctuate as a percentage of total revenue.

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
General and administrative	\$ 86.7	\$ 69.8	\$ 16.9	24.2 %
Number of employees at period end	895	831	64	7.7 %

General and administrative expense increased for the three months ended October 31, 2020 compared to the same period in 2019. Personnel costs increased \$7.2 million to \$53.5 million, primarily due to the accelerated vesting of certain equity awards in connection with our acquisitions. The remaining increase was due to increases in credit losses and acquisition-related costs.

Interest Expense

Interest expense primarily consists of non-cash interest expense from the amortization of the debt discount and debt issuance costs related to our 0.75% Convertible Senior Notes due 2023 (the “2023 Notes”) and the 0.375% Convertible Senior Notes due 2025 (the “2025 Notes,” and together with “2023 Notes,” the “Notes”), and also includes the contractual interest expense related to our Notes.

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Interest expense	\$ 40.2	\$ 18.9	\$ 21.3	112.7 %

Interest expense increased for the three months ended October 31, 2020 compared to the same period in 2019 primarily due to our 2025 Notes issued in fiscal 2020. Refer to Note 10. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on our Notes.

Other Income, Net

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

	Three Months Ended October 31,			
	2020	2019	Change	
	Amount	Amount	Amount	%
	(dollars in millions)			
Other income, net	\$ 2.4	\$ 16.2	\$ (13.8)	(85.2)%

Other income, net decreased for the three months ended October 31, 2020 compared to the same period in 2019. The decrease was primarily due to lower interest income earned on our cash, cash equivalents, and investments balances as a result of lower interest rates at October 31, 2020 compared to October 31, 2019.

Provision for Income Taxes

Provision for income taxes consists primarily of income taxes in foreign jurisdictions in which we conduct business 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. In recent years, we reorganized our corporate structure and intercompany relationships to more closely align with the international nature of our business activities. Our corporate structure has caused, and may continue to cause, disproportionate relationships between our overall effective tax rate and other jurisdictional measures. To the extent we revisit our corporate structure, it may have an impact on our tax provision.

	Three Months Ended October 31,		Change	
	2020	2019	Amount	%
	(dollars in millions)			
Provision for income taxes	\$ 9.9	\$ 5.1	\$ 4.8	94.1 %
Effective tax rate	(12.0)%	(9.4)%		

We recorded an income tax provision for the three months ended October 31, 2020 primarily due to income taxes in profitable foreign jurisdictions and withholding taxes. Our provision for income taxes increased for the three months ended October 31, 2020 compared to the same period in 2019, primarily due to an increase in foreign income and withholding taxes. Refer to Note 14. Income Taxes in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information.

Liquidity and Capital Resources

	October 31, 2020	July 31, 2020
	(in millions)	
Working capital	\$ 1,665.8	\$ 2,437.5
Cash, cash equivalents, and investments:		
Cash and cash equivalents	\$ 2,142.0	\$ 2,958.0
Investments	1,948.8	1,344.2
Total cash, cash equivalents, and investments	<u>\$ 4,090.8</u>	<u>\$ 4,302.2</u>

As of October 31, 2020, our total cash, cash equivalents, and investments of \$4.1 billion were held for general corporate purposes, of which approximately \$595.1 million was held outside of the United States. As of October 31, 2020, 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 payable 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.

In July 2018, we issued the 2023 Notes with an aggregate principal amount of \$1.7 billion. In June 2020, we issued the 2025 Notes with an aggregate principal amount of \$2.0 billion. The 2023 Notes mature on July 1, 2023 and the 2025 Notes mature on June 1, 2025; however, under certain circumstances, holders may surrender their Notes of a series for conversion prior to the applicable maturity date. Upon conversion of the Notes of a series, we will pay cash equal to the aggregate principal amount of the Notes of such series to be converted, and, at our election, 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 Notes of such series being converted. As of October 31, 2020, all of our Notes remained outstanding. Refer to Note 10. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for information on the Notes.

In September 2018, 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 up to an additional \$350.0 million, subject to certain conditions. As of October 31, 2020, there were no amounts outstanding and we were in compliance with all covenants under the Credit Agreement. Refer to Note 10. Debt in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on the Credit Agreement.

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program which is funded from available working capital and will expire on December 31, 2020. During the three months ended October 31, 2020, we purchased 2.1 million shares for \$500.0 million, leaving \$301.9 million available for future share repurchases under this repurchase authorization. Refer to Note 12. Stockholders' Equity in Part I, Item 1 of this Quarterly Report on Form 10-Q for more information on our repurchase programs.

The following table summarizes our cash flows for the three months ended October 31, 2020 and 2019:

	Three Months Ended October 31,	
	2020	2019
	(in millions)	
Net cash provided by operating activities	\$ 534.9	\$ 225.2
Net cash provided by (used in) investing activities	(886.2)	244.5
Net cash used in financing activities	(464.5)	(167.1)
Net increase (decrease) in cash, cash equivalents, and restricted cash	<u>\$ (815.8)</u>	<u>\$ 302.6</u>

Cash from operations could be affected by various risks and uncertainties, including, but not limited to, the effects of COVID-19 and other risks detailed in Part II, Item 1A “Risk Factors” in this 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 investments in our new corporate headquarters, the continuing market acceptance of our products and subscription and support offerings, and macroeconomic events such as COVID-19. 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 losses adjusted for certain non-cash items and changes in assets and liabilities.

Cash provided by operating activities during the three months ended October 31, 2020 was \$534.9 million, an increase of \$309.7 million compared to the same period in 2019. The increase was primarily due to growth of our business as reflected by an increase in billings, and an increase in collections during the three months ended October 31, 2020.

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, 2020 was \$886.2 million, a net change of \$1.1 billion compared to cash provided by investing activities of \$244.5 million during the same period in 2019. The change was primarily due to higher purchases of investments, an increase in net cash payments for business acquisitions and a decrease in proceeds from maturities of investments during fiscal 2020.

Financing Activities

Our financing activities have consisted of cash used to repurchase shares of our common stock, 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, 2020 was \$464.5 million, an increase of \$297.4 million compared to the same period in 2019. The increase was primarily due to higher repurchases of our common stock during the three months ended October 31, 2020.

Contractual Obligations and Commitments

Except for those disclosed in Note 11. Commitments and Contingencies in Part I, Item 1 of this Quarterly Report on Form 10-Q, there have been no material changes outside of the ordinary course of business to our contractual obligations and commitments disclosed in our Annual Report on Form 10-K for the fiscal year ended July 31, 2020.

Off-Balance Sheet Arrangements

As of October 31, 2020, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

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. These estimates and assumptions are affected by management's application of accounting policies, as well as uncertainties, including the current economic environment due to the global impact of COVID-19. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future 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, 2020 reflect our more significant judgments and estimates used in the preparation of our condensed consolidated financial statements. There have been no significant changes to our critical accounting estimates as filed in such report.

Recent Accounting Pronouncements

For a discussion of the recent accounting pronouncements, refer to "Recently Adopted Accounting Pronouncements" and "Recently Issued Accounting Pronouncements" in Note 1. Description of Business and Summary of Significant Accounting Policies in Part I, Item 1 of this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our assessment of our exposures to market risk has not changed materially since the presentation set forth in Part II, Item 7A of our Annual Report on Form 10-K for the fiscal year ended July 31, 2020.

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, 2020, 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

As a result of COVID-19, most of our workforce has been working from home since March 2020. However, 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, 2020 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 11. 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 COVID-19 and any worsening of the economic environment may exacerbate the risks described below, any of which could have a material impact on us. This situation is changing rapidly, and additional impacts may arise that we are not currently aware of.

Risks Related to Our Business and Our Industry

The ongoing global COVID-19 outbreak could harm our business and results of operations.

The novel strain of COVID-19 identified in late 2019 has spread globally, including within the United States, and has resulted in government authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and shutdowns. This outbreak has negatively impacted and will likely continue to have a negative impact on, worldwide economic activity and financial markets and has impacted, and will further impact, our workforce and operations, the operations of our end-customers, and those of our respective channel partners, vendors and suppliers. In light of the uncertain and rapidly evolving situation relating to the spread of this virus and various government restrictions and guidelines, we have taken measures intended to mitigate the spread of the virus and minimize the risk to our employees, channel partners, end-customers, and the communities in which we operate. These measures include transitioning our employee population to work remotely from home beginning in March 2020, which continued through the first quarter of fiscal 2021 and is expected to continue into future quarters. Although we continue to monitor the situation and may adjust our current policies as more information and public health guidance become available, these precautionary measures that we have adopted could negatively affect our customer success efforts, sales and marketing efforts, delay and lengthen our sales cycles, and create operational or other challenges, any of which could harm our business and results of operations. In addition, COVID-19 may continue to disrupt the operations of our end-customers and channel partners for an indefinite period of time, including as a result of travel restrictions and/or business shutdowns, all of which could negatively impact our business and results of operations, including cash flows.

The ongoing impact of COVID-19 is fluid and uncertain, but it has caused and may continue to cause various negative effects, including an inability to meet with our existing or potential end-customers; our end-customers deciding to delay or abandon their planned purchases; increased requests for delayed payment terms or product discounts by our end-customers and channel partners; us delaying, canceling, or withdrawing from user and industry conferences and other marketing events, including some of our own; changes in the demand of our products, which has caused us to reprioritize our engineering and research and development efforts and make changes to our original offering roadmap; and delays or possible disruptions in our supply chain. As a result, we may experience extended sales cycles; our demand generation activities, and our ability to close transactions with end-customers and partners may be negatively impacted; our ability to provide 24x7 worldwide support and/or replacement parts to our end-customers may be adversely affected; and it has been and, until the COVID-19 outbreak is contained and global economic activity stabilizes, will continue to be more difficult for us to forecast our operating results.

More generally, the outbreak has not only significantly and adversely increased economic and demand uncertainty, but it has caused a global economic slowdown, and it is likely that it will cause a global recession which could likely decrease technology spending and adversely affect demand for our offerings and harm our business and results of operations.

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 significantly, and we expect it to continue to grow over the next year. For example, from the end of fiscal 2020 to the end of the first quarter of fiscal 2021, our headcount increased from 8,014 to 8,376 employees. In addition, as we have grown, our number of end-customers has also increased significantly, and we have increasingly 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, all of which may be more difficult to accomplish the longer that our employees must work remotely from home.

We may not be able to successfully implement or scale improvements to our systems, processes, and controls in an efficient or timely manner. 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 harm our business performance and operating results.

Our operating results may vary significantly from period to period and be unpredictable, which could cause the market price of our common stock to decline.

Our operating results, in particular, our revenues, gross margins, operating margins, and operating expenses, have historically varied from period to period, and even though we have experienced growth, we expect variation to continue as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- our ability to attract and retain new end-customers or sell additional products and subscriptions to our existing end-customers;
- the budgeting cycles, seasonal buying patterns, and purchasing practices of our end-customers, including the likely slowdown in technology spending due to the global economic downturn;
- changes in end-customer, distributor or reseller requirements, or market needs;
- price competition;
- the timing and success of new product and service introductions by us or our competitors or any other change in the competitive landscape of our industry, including consolidation among our competitors or end-customers and strategic partnerships entered into by and between our competitors;
- changes in the mix of our products, subscriptions, and support, including changes in multi-year subscriptions and support;
- our ability to successfully and continuously expand our business domestically and internationally, particularly in the current global economic slowdown;
- changes in the growth rate of the enterprise security market;
- deferral of orders from end-customers in anticipation of new products or product enhancements announced by us or our competitors;
- the timing and costs related to the development or acquisition of technologies or businesses or strategic partnerships;
- lack of synergy or the inability to realize expected synergies, resulting from acquisitions or strategic partnerships;
- our inability to execute, complete, or integrate efficiently any acquisitions that we may undertake;
- increased expenses, unforeseen liabilities, or write-downs and any impact on our operating results from any acquisitions we consummate;
- our ability to increase the size and productivity of our distribution channel;
- decisions by potential end-customers to purchase security solutions from larger, more established security vendors or from their primary network equipment vendors;
- changes in end-customer penetration or attach and renewal rates for our subscriptions;
- timing of revenue recognition and revenue deferrals;
- our ability to manage production and manufacturing related costs, global customer service organization costs, inventory excess and obsolescence costs, and warranty costs, especially due to potential disruptions in our supply chain as a result of COVID-19;
- our ability to manage cloud hosting service costs and scale the cloud-based subscription offerings;
- insolvency or credit difficulties confronting our end-customers, which could increase due to the effects of COVID-19 and adversely affect their ability to purchase or pay for our products and subscription and support offerings in a timely manner or at all, or confronting our key suppliers, including our sole source suppliers, which could disrupt our supply chain;
- any disruption in our channel or termination of our relationships with important channel partners, including as a result of consolidation among distributors and resellers of security solutions;
- our inability to fulfill our end-customers' orders due to supply chain delays or events that impact our manufacturers or their suppliers, which may be adversely affected by the effects of COVID-19;
- the cost and potential outcomes of litigation, which could have a material adverse effect on our business;

- seasonality or cyclical fluctuations in our markets;
- future accounting pronouncements or changes in our accounting policies;
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates, as an increasing amount of our expenses is incurred and paid in currencies other than the U.S. dollar;
- political, economic, and social instability caused by the referendum in June 2016, in which voters in the United Kingdom (the “U.K.”) approved an exit from the European Union (the “E.U.”) and the U.K. government subsequently notified the E.U. of its withdrawal, which is commonly referred to as “Brexit,” continued hostilities in the Middle East, terrorist activities, and any disruption from COVID-19 and any disruption these events may cause to the broader global industrial economy; and
- general macroeconomic conditions, both domestically and in our foreign markets that could impact some or all regions where we operate, including the expected global economic slowdown and potential global recession caused by the COVID-19 pandemic.

Any one of the factors above, or the cumulative effect of some of the factors referred to above, may result in significant fluctuations in our financial and other operating results. This variability and unpredictability could result in our failure to meet our revenue, margin, or other operating result expectations 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.

The sudden and significant global economic downturn could have an adverse effect on our business and operating results.

We operate globally and as a result our business and revenues are impacted by global macroeconomic conditions. The multinational efforts to contain the spread of COVID-19 have had a significant adverse effect on the global macroeconomic environment that could lead to a global recession. In addition, the instability in the global credit markets, the recent contraction of China’s economy, falling demand for oil and other commodities, uncertainties regarding the effects of Brexit, uncertainties related to the timing of the lifting of governmental restrictions to mitigate the spread of COVID-19, uncertainties related to elections and changes in public policies such as domestic and international regulations, taxes, or international trade agreements, international trade disputes, government shutdowns, geopolitical turmoil and other disruptions to global and regional economies and markets could continue to add uncertainty to global economic conditions.

These adverse conditions could result in reductions in sales of our products and subscriptions, longer sales cycles, reductions in subscription or contract duration and value, slower adoption of new technologies, and increased price competition. As a result, any continued or further uncertainty, weakness or deterioration in global macroeconomic and market conditions may cause our end-customers to modify spending priorities or delay purchasing decisions, and result in lengthened sales cycles, any of which could harm our business and operating results.

Our revenue growth rate in recent periods may not be indicative of our future performance.

We experienced revenue growth rates of 22.6% and 17.7% in the first quarter of fiscal 2021 and the first quarter of fiscal 2020, respectively. Our revenue for any prior 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 achieve and maintain profitability or maintain or increase cash flow on a consistent basis.

We have a history of losses, anticipate increasing our operating expenses in the future, and may not be able to achieve or maintain profitability or maintain or increase cash flow on a consistent basis, which could cause our business, financial condition, and operating results to suffer.

Other than fiscal 2012, we have incurred losses in all fiscal years since our inception. As a result, we had an accumulated deficit of \$1,260.1 million as of October 31, 2020. 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 the downturn in the global and U.S. economy due to COVID-19, 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. Any failure to increase our revenue as we grow our business could prevent us from achieving or maintaining profitability or maintaining or increasing cash flow on a consistent basis. In addition, we may have difficulty achieving profitability under U.S. GAAP due to share-based compensation expense and other non-cash charges. If we are unable to navigate these challenges as we encounter them, our business, financial condition, and operating results may suffer.

If we are unable to sell new and additional product, subscription, and support offerings to our end-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 and create demand for our new offerings, including cloud security, AI, and analytics offerings. This may require increasingly sophisticated

and costly sales efforts that may not result in additional sales. 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. Further, 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. Our end-customers' renewal rates may decline or fluctuate as a result of a number of factors, including their level of satisfaction with our subscriptions and our support offerings, the frequency and severity of subscription outages, our product uptime or latency, and the pricing of our, or competing, subscriptions. 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. We also cannot be certain that our end-customers will renew their subscription and support agreements. If our efforts to sell additional products and subscriptions to our end-customers are not successful or our end-customers do not renew their subscription and support agreements or renew them on less favorable terms, our revenues may grow more slowly than expected or decline.

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

The market 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 five categories:

- large companies that incorporate security features in their products, such as Cisco Systems, Inc. ("Cisco") or those that have acquired, or may acquire, large network and endpoint security vendors and have the technical and financial resources to bring competitive solutions to the market;
- independent security vendors such as Check Point Software Technologies Ltd. ("Check Point"), Fortinet, Inc. ("Fortinet"), and Zscaler, Inc. ("Zscaler") that offer a mix of network and endpoint security products;
- startups and single-vertical vendors that offer independent or emerging solutions in network;
- public cloud vendors and startups that offer solutions for cloud security (private, public and hybrid cloud); and
- large and small companies, such as CrowdStrike, Inc ("CrowdStrike") that offer solutions for security operations and endpoint security.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

- greater name recognition and longer operating histories;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with distribution partners and end-customers;
- greater customer support resources;
- greater resources to make strategic acquisitions or enter into strategic partnerships;
- lower labor and development costs;
- newer or disruptive products or technologies;
- larger and more mature intellectual property portfolios; and
- substantially greater financial, technical, and other resources.

In addition, some of our larger competitors have substantially broader and more diverse product and services offerings, which may make them less susceptible to downturns in a particular market and 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 through selling at zero or negative margins, offering concessions, product bundling, or a closed technology offering. Many of our smaller competitors that specialize in providing protection from a single type of security threat are often able to deliver these specialized security products to the market more quickly than we can.

Organizations that use legacy products and services may believe that these products and services are sufficient to meet their security needs or that our offerings only serve the needs of a portion of the enterprise security market. Accordingly, these organizations may continue allocating their information technology budgets for legacy products and services and may not adopt our security offerings. Further, many organizations have 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 regardless of product performance, features, or greater services offerings or may be more willing to incrementally add solutions to their existing security infrastructure from existing suppliers than to replace it wholesale with our solutions.

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. New start-up companies that innovate and large competitors that are making significant investments in research and development may invent similar or superior products and technologies that compete with our products and subscriptions. 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. Any failure to meet and address these factors could seriously harm our business and operating results.

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 add to the risks to our internal networks, cloud deployed enterprise and customer facing environments and the information they store and process. These risks may increase due to COVID-19. Despite significant efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks. We and our third-party service providers may face security threats and attacks from a variety of sources. Our data, corporate systems, third-party systems and security measures may be breached due to the actions of outside parties, employee error, malfeasance, a combination of these, or otherwise, and, as a result, an unauthorized party may obtain access to our data. Furthermore, as a well-known provider of security solutions, we may be a more attractive target for such attacks. A breach in our data security or an attack against our service availability, or that of 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, and the information stored on our networks or those of our third-party service providers could be accessed, publicly disclosed, altered, lost, or stolen, which could subject us to liability and cause us financial harm. Although we have not yet experienced significant damages from unauthorized access by a third party of our internal network, any actual or perceived breach of network 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 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, 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 and devices 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. While we maintain cybersecurity insurance, our insurance may be insufficient to cover all liabilities incurred by these incidents, and any incidents may result in loss of, or increased costs of, our cybersecurity insurance. 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.

Reliance on shipments at the end of the quarter could cause our revenue for the applicable period to fall below expected levels.

As a result of end-customer buying patterns and the efforts of our sales force and channel partners to meet or exceed their sales objectives, 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 (including due to the effects of COVID-19), 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), revenue could fall below our expectations and the estimates of analysts for that quarter, which could adversely impact our business and operating results and cause a decline in the market price of our common stock.

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;

- seasonal reductions in business activity during August in the United States, Europe and certain other regions, which potentially results in a negative impact on our first fiscal quarter revenue; 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.

If we are unable to hire, integrate, train, retain, and motivate qualified personnel and senior management, our business could suffer.

Our future success depends, in part, on our ability to continue to hire, integrate, train, and retain qualified and highly skilled personnel. We are substantially dependent on the continued service of our existing engineering personnel because of the complexity of our offerings. Additionally, any failure to hire, integrate, train, and adequately incentivize our sales personnel or the inability of our recently hired sales personnel to effectively ramp to target productivity levels could negatively impact our growth and operating margins. Competition for highly skilled personnel, particularly in engineering, is often intense, especially in the San Francisco Bay Area, where we have a substantial presence and need for such personnel. Due to COVID-19, we slowed hiring in the third quarter of 2020, which could adversely affect our ability to retain qualified personnel. Additionally, potential changes in U.S. immigration and work authorization laws and regulations, including in reaction to COVID-19, may make it difficult to renew or obtain visas for any highly skilled personnel that we have hired or are actively recruiting.

In addition, the industry in which we operate generally experiences high employee attrition. Although we have entered into employment offer letters with our key personnel, these agreements have no specific duration and constitute at-will employment. We do not maintain key person life insurance policies on any of our employees. The loss of one or more of our key employees, and any failure to have in place and execute an effective succession plan for key executives, could seriously harm our business. 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.

Our future performance also depends on the continued services and continuing contributions of our senior management to execute on our business plan and to identify and pursue new opportunities and product innovations. The loss of services of senior management, the decrease in the effectiveness of such services due to working remotely from home, or the ineffective management of any leadership transitions, especially within our sales organization, could significantly delay or prevent the achievement of our development and strategic objectives, which could adversely affect our business, financial condition, and operating results.

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, 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. 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.

If we are not successful in executing our strategy to increase sales of our products and subscriptions to new and existing medium and large enterprise end-customers, our operating results may suffer.

Our growth strategy is dependent, in part, upon increasing sales of our products, services, subscriptions and offerings to new and existing medium and large enterprise end-customers. Sales to these end-customers involve risks that may not be present, or that are present to a lesser extent, with sales to smaller entities. These risks include:

- competition from competitors, such as Cisco and Check Point, that traditionally target larger enterprises, service providers, and government entities and that may have pre-existing relationships or purchase commitments from those end-customers;
- increased purchasing power and leverage held by large end-customers in negotiating contractual arrangements with us;
- more stringent requirements in our worldwide support contracts, including stricter support response times and penalties for any failure to meet support requirements; and
- longer sales cycles, particularly during the current economic slowdown and in some cases over 12 months, and the associated risk that substantial time and resources may be spent on a potential end-customer that elects not to purchase our products and subscriptions.

In addition, product purchases by large enterprises are frequently subject to budget constraints, multiple approvals, and unplanned administrative, processing, and other delays. Finally, large enterprises typically have longer implementation cycles, require greater product functionality and scalability and a broader range of services, demand that vendors take on a larger share of risks, sometimes require acceptance provisions that can lead to a delay in revenue recognition, and expect greater payment flexibility from vendors. All of these factors can add further risk to business conducted with these end-customers. If we fail to realize an expected sale

from a large end-customer in a particular quarter or at all, our business, operating results, and financial condition could be materially and adversely affected.

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 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 74.9% of total revenue in the first quarter of fiscal 2021 and 70.0% of total revenue in the first quarter of fiscal 2020. Sales of new or renewal 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 (including newly integrated products and services), the prices of our products and subscriptions, the prices of products and services offered by our competitors, and reductions in our end-customers' spending levels. 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, we recognize subscription and support revenue over the term of the relevant service period, which is typically one to five years. As a result, much of the subscription and support revenue we report each fiscal quarter is the recognition of deferred revenue from subscription and support contracts entered into during previous fiscal quarters. Consequently, a decline in new or renewed 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. Also, it is difficult for us to rapidly increase our subscription and support revenue through additional subscription and support sales in any period, as revenue from new and renewal subscription and support contracts must be recognized over the applicable service period.

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, 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. Furthermore, as a well-known provider of security solutions, our networks, products, including cloud-based technology, and subscriptions could be targeted by attacks specifically designed to disrupt our business and harm our reputation. In addition, defects or errors in our subscription updates or our products could result in a failure of our subscriptions to effectively update end-customers' hardware and cloud-based products. Our data centers and networks may experience technical failures and downtime, may fail to distribute appropriate updates, 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 different 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, or investigations, 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. We maintain insurance to protect against certain claims associated with the use of our products and subscriptions, but our insurance coverage may not adequately cover any claim asserted against us. 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.

False detection of applications, viruses, spyware, vulnerability exploits, data patterns, or URL categories could adversely affect our business.

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. If our products and subscriptions restrict important files or applications based on falsely identifying them as malware or some other item that should be restricted, this could adversely affect end-customers' systems and cause material system failures. Any such false identification of important files or applications 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.

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. 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 channel partners operations may also be negatively impacted by other effects COVID-19 is having on the global economy, such as increased credit risk of end-customers and the uncertain credit markets. 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.

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 market, our competitive position and prospects will be harmed.

The enterprise security market has grown quickly and is expected to continue 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. 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. In 2019, we announced our new cloud security offerings, for securing access to the cloud (Prisma), and our security offerings for securing the future of security operations (Cortex). 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 end-customers' changing needs and emerging technological trends in the enterprise security industry, including in the areas of mobility, virtualization, cloud computing, and software defined networks ("SDN"), our business could be harmed. In addition, COVID-19 and the resulting increase in customer demand for work-from-home technologies and other technologies have caused us to reprioritize our engineering and R&D efforts and there can be no assurance that any product enhancements or new features will be successful or address our end-customer needs.

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.

Additionally, we must commit significant resources to developing new features and new cloud security, AI/analytics and other offerings before knowing whether our investments will result in products, subscriptions, and features the market will accept. 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, or achieve market acceptance of our products and subscriptions, including our product enhancement efforts in connection with COVID-19, or that products, subscriptions, and technologies developed by others will not render our products, subscriptions, or technologies obsolete or noncompetitive.

Our current research and development efforts may not produce successful products, subscriptions, or features that result in significant revenue, cost savings or other benefits in the near future, if at all.

Developing our products, subscriptions, features, and related enhancements is expensive. Our investments in research and development may not result in significant design improvements, marketable products, subscriptions, or features, or may result in products, subscriptions, or features that are more expensive than anticipated. Additionally, we may not achieve the cost savings or the anticipated performance improvements we expect, and we may take longer to generate revenue, or generate less revenue, than we anticipate. Our future plans include significant investments in research and development and related product and subscription opportunities. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. However, we may not receive significant revenue from these investments in the near future, if at all, or these investments may not yield the expected benefits, either of which could adversely affect our business and operating results.

We may acquire other businesses, which could require significant management attention, disrupt our business, dilute stockholder value, and adversely affect our operating results.

As part of our business strategy, we may acquire or make investments in complementary companies, products, or technologies. For example, in March 2018, we acquired Evident.io, Inc., in April 2018, we acquired Cyber Secdo Ltd. (“Secdo”), in October 2018, we acquired RedLock Inc., in March 2019, we acquired Demisto, Inc., in June 2019, we acquired PureSec Ltd. (“PureSec”), in July 2019, we acquired Twistlock Ltd. (“Twistlock”), in September 2019, we acquired Zingbox, in December 2019 we acquired Aporeto and in April 2020 we acquired CloudGenix Inc (“CloudGenix”). In addition, in the first quarter of fiscal 2021 we acquired Crypsis, and in the second quarter of fiscal 2021 we entered into definitive agreements to acquire Sinefa Group, Inc. and Expanse Inc., both of which we expect will close during our second quarter of fiscal 2021. The identification of suitable acquisition candidates is difficult, and we may not be able to complete such acquisitions on favorable terms, if at all. If we do complete future acquisitions, we may not ultimately strengthen our competitive position or achieve our goals and business strategy; 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, the revenue and operating results of the combined company 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 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. 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. See the risk factors entitled “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” and “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 all other stockholders.” The occurrence of any of these risks could harm our business, operating results, and financial condition.

Risks Related to our Supply Chain

Because we depend on manufacturing partners to build and ship our 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 Flextronics International, Ltd. (“Flex”), our electronics manufacturing service provider (“EMS provider”), as our sole source manufacturers for our 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 products are manufactured by our manufacturing partners at facilities located 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 products that are sourced outside the United States may subject us to additional logistical risks (which may increase due to the global impact of COVID-19) 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. These tariffs, depending on their ultimate scope and how they are implemented, could negatively impact our business by increasing our costs. For example, some components that we import for final manufacturing in the United States have been impacted by these recent tariffs. As a result, our costs have increased and we have raised, and may be required to further raise, prices on our hardware products. Each of these factors could severely impair our ability to fulfill orders.

In addition, we are subject to requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) to diligence, disclose, and report whether or not our products contain minerals originating from the Democratic Republic of the Congo and adjoining countries, or conflict minerals. Although the SEC has provided guidance with respect to a portion of the conflict minerals filing requirements that may somewhat reduce our reporting practices, we have incurred and expect to incur additional costs to comply with these disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. These requirements could adversely affect the sourcing, availability, and pricing of minerals used in the manufacture of semiconductor devices or other components used in our products. We may also encounter end-customers who require that all of the components of our products be certified as conflict free. If we are not able to meet this requirement, such end-customers may choose not to purchase our products.

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. COVID-19 has resulted in certain cases to cause delays and challenges in obtaining components and inventory, as well as increases to freight and shipping costs, and may result in a material adverse effect on our results of operations. Any production interruptions for any reason, such as a natural disaster, epidemic or pandemic such as COVID-19, 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 products and product components is complex. Insufficient supply and inventory may result in lost sales opportunities or delayed revenue, while excess inventory may harm our gross margins.

Our manufacturing partners procure components and build our 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. COVID-19 has made forecasting more difficult and we may experience increased challenges to our supply chain due to the unpredictability of the impacts of COVID-19. 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 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 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 products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which could disrupt or delay our scheduled product deliveries to our end-customers and may result in the loss of sales and end-customers.

Our 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, a power outage, or health risks, such as epidemics and pandemics like COVID-19, and as a result could impair the volume of components that we are able to obtain. Lead times for components may also be adversely impacted by factors outside of our control including COVID-19.

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 products could be delayed or halted, or we could be forced to expedite shipment of such components or our 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, and because we do not have volume purchase contracts with these 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 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 products and the expense of redesigning our products could result in lost sales opportunities and damage to customer relationships, which would adversely affect our business and operating results.

Risks Related to Sales of our Products, Subscriptions and Support Offerings

The sales prices of our products and subscription and support offerings may decrease, which may reduce our 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 as a result of the economic downturn resulting from COVID-19. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions. Additionally, although we price our products, subscriptions and support offerings worldwide in U.S. dollars, currency fluctuations in certain countries and regions may negatively impact actual prices that channel partners and end-customers are willing to pay in those countries and regions. Furthermore, we anticipate that the sales prices and gross profits for our products could decrease over product life cycles. We cannot guarantee that we will be successful in developing and introducing new offerings with enhanced functionality on a timely basis, or that our product, subscriptions and support offerings, if introduced, will enable us to maintain our prices and gross profits at levels that will allow us to achieve and maintain profitability.

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 have a limited history of marketing, selling, and supporting our products, subscriptions and support offerings internationally. We may experience difficulties in recruiting, training, managing, and retaining an international staff, and specifically staff related to sales management and sales personnel. We also may not be able to maintain successful strategic distributor relationships internationally or recruit additional companies to enter into strategic distributor relationships. 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, and continued hostilities in the Middle East;
- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- the uncertainty of protection for intellectual property rights in some countries;
- greater risk of unexpected changes in foreign and domestic regulatory practices, tariffs, and tax laws and treaties, including regulatory and trade policy changes adopted by the current administration or foreign countries in response to regulatory changes adopted by the current administration;

- risks associated with trade restrictions and foreign legal requirements, including the importation, certification, and localization of our products required in foreign countries;
- greater risk of a failure of foreign employees, channel partners, distributors, and resellers to comply with both U.S. and foreign laws, including antitrust regulations, the U.S. Foreign Corrupt Practices Act, 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, which non-compliance could include increased costs;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- management communication and integration problems resulting from cultural and geographic dispersion; and
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business and related impact on sales cycles.

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.

Further, we are subject to risks associated with changes in economic and political conditions in countries in which we operate or sell our products and subscriptions. For instance, Brexit creates an uncertain political and economic environment in the U.K. and across E.U. member states for the foreseeable future, including during the transition period connected to Brexit. Any agreements arising out of negotiations which the U.K. government makes to retain access to E.U. markets may lead to greater restrictions on the free movement of goods, services, people and capital between the U.K. and the remaining E.U. member states. Our financial condition and operating results in the U.K. and the E.U. may be impacted by such uncertainty with potential disruptions to our relationships with existing and future customers, suppliers and employees all possibly having a material adverse impact on our business, prospects, financial condition and/or operating results.

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

Our sales contracts are primarily denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, there has been, and may continue to be, significant volatility in global stock markets and foreign currency exchange rates that result in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. The strengthening of the U.S. dollar increases the real cost of our products to our end-customers outside of the United States and may lead to delays in the purchase of our products, subscriptions, and support, and the lengthening of our sales cycle. If the U.S. dollar continues to strengthen, this 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 greater foreign currency denominated sales, increasing our foreign currency risk.

Our operating expenses incurred outside the United States and denominated in foreign currencies are 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, 2020, the total notional amount of our outstanding foreign currency forward contracts was \$386.7 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 are exposed to the credit and liquidity risk of some of our channel partners and end-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 due to COVID-19 and our competitors' offerings. The majority of these demands are currently facilitated by leasing and other financing arrangements provided by our distributors and resellers. To respond to this demand, we expect to increase our customer financing activities in the future.

We believe customer financing is a competitive factor in obtaining business. The loan financing arrangements provided by our distributors and resellers may include not only financing the acquisition of our products and services but also providing additional funds for other costs associated with network installation and integration of our products and services.

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. Although we have programs in place with our distributors and resellers that are designed to monitor and mitigate these risks, we cannot guarantee these programs will be effective in reducing the credit risks, especially as we expand our business internationally. If we are unable to adequately control these risks, our business, operating results, and financial condition could be harmed.

In the past, we have experienced non-material losses due to bankruptcies among customers. If these losses increase due to COVID-19 or global economic conditions, they could harm our business and financial condition. A material portion of our sales is derived through our distributors.

For the first quarter of fiscal 2021, three distributors individually represented 10% or more of our total revenue, and in the aggregate represented 57.5% of our total revenue. As of October 31, 2020, two distributors individually represented 10% or more of our gross accounts receivable, and in the aggregate represented 38.0% of our gross accounts receivable.

Additionally, 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.

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.

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. Our channel partners often provide similar technical support for third parties' products and may therefore have fewer resources to dedicate to the support of our products and subscriptions. If we or our channel partners do not effectively assist our end-customers in deploying our products and subscriptions, succeed in helping our end-customers quickly resolve post-deployment issues, or provide effective ongoing support, our ability to sell additional products and subscriptions to existing end-customers would be adversely affected and our reputation with potential end-customers could be damaged. While we have been able to meet increased demand for support services in the first quarter of fiscal 2021, failure to do so in the future could have a material adverse effect on our business.

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 we or our channel partners fail to meet the requirements of these larger end-customers, it may be more difficult to execute on our strategy to increase our coverage with larger end-customers. Additionally, 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. It can take several months to recruit, hire, and train qualified technical support employees. We may not be able to hire such resources fast enough to keep up with unexpected demand, particularly if the sales of our products exceed our internal forecasts. As a result, our ability, and the ability of our channel partners to provide adequate and timely 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 our support resources, our sales productivity will be negatively impacted, which would harm our revenues. 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 proprietary technology or other 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 or other rights. Third parties have asserted and may in the future assert claims of infringement of intellectual property rights against us. For example, in December 2011, Juniper, one of our competitors, filed a lawsuit against us alleging patent infringement. In September 2013, we filed a lawsuit against Juniper alleging patent infringement. In May 2014, we entered into a Settlement, Release and Cross-License Agreement with Juniper to resolve all pending disputes between Juniper and us, including dismissal of all pending litigation.

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 or products and subscriptions. As the number of products and competitors in our market increases and overlaps occur, infringement claims may increase. While we intend to increase 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 may 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 Privacy and Data Protection

Our failure to adequately protect personal information could have a material adverse effect on our business.

A wide variety of provincial, state, national, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data. These data protection and privacy-related laws and regulations are evolving and being tested in courts and may result in ever-increasing regulatory and public scrutiny as well as escalating levels of enforcement and sanctions. Further, the interpretation and application of foreign laws and regulations in many cases is uncertain, and our legal and regulatory obligations in foreign jurisdictions are subject to frequent and unexpected changes, including the potential for various regulatory or other governmental bodies to enact new or additional laws or regulations, to issue rulings that invalidate prior laws or regulations, or to increase penalties significantly.

For example, the E.U. General Data Protection Regulation (“GDPR”), which became effective in May 2018, imposes more stringent data protection requirements, and provides for greater penalties for noncompliance, than E.U. laws that previously applied.

The GDPR requires, among other things, that personal data only be transferred outside of the E.U. to certain jurisdictions, including the United States, if steps are taken to legitimize those data transfers. We have relied on the E.U.-U.S. and Swiss-U.S. Privacy Shield programs, and the use of model contractual clauses approved by the E.U. Commission, to legitimize these transfers. Both the E.U.-U.S. Privacy Shield and these model contractual clauses have been subject to legal challenge. We are dealing with the recent “Schrems II” decision by the Court of Justice of the European Union and its impact on our data transfer mechanisms. The effects of this decision are highly uncertain and difficult to predict. Among other effects, we may experience additional costs associated with increased compliance burdens and new contract negotiations with third parties that aid in processing data on our behalf. We may experience reluctance or refusal by current or prospective European customers to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of residents of the European Economic Area (“EEA”). The regulatory environment applicable to the handling of EEA residents’ personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face a risk of enforcement actions by data protection authorities in the EEA relating to personal data transfers to us and by us from the EEA. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results, and financial condition.

In the U.K., a Data Protection Act that substantially implements the GDPR also became law in May 2018. It remains unclear, however, how this act and other U.K. data protection laws or regulations will develop in the medium to longer term and how data transfers to and from the United Kingdom will be regulated after Brexit.

California recently enacted the California Consumer Privacy Act (“CCPA”), which requires, among other things, covered companies to provide new disclosures to California consumers, and afford such consumers new abilities to opt-out of certain sales of personal information, and also affords a private right of action to individuals affected by a data breach, if the breach was caused by a lack of reasonable security. The enforcement of the CCPA by the California Attorney General commenced on July 1, 2020. The CCPA has been amended on multiple occasions and is the subject of regulations of the California Attorney General, which could be subject to additional modifications. It remains unclear what, if any, additional modifications will be made to this legislation or how it will be interpreted and enforced. The effects of the CCPA potentially are significant, however, and may require us to modify our data processing practices and policies and to incur substantial costs and expenses for compliance. Moreover, a new privacy law, the California Privacy Rights Act (“CPRA”) was approved by California voters, and significantly modifies the CCPA, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply.

We may also from time to time be subject to, or face assertions that we are subject to, additional obligations relating to personal data by contract or due to assertions that self-regulatory obligations or industry standards apply to our practices. Other states have also expanded their data protection laws. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination, and security of data. Further, we may be or become subject to data localization laws mandating that data collected in a foreign country be processed and stored within that country. Each of these privacy, security, and data protection laws and regulations, and any other such changes or new laws or 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.

Our actual or perceived failure to comply with applicable laws and regulations or other obligations to which we are now or which we may be subject relating to personal data, or to protect personal data from unauthorized acquisition, use or other processing, could result in consequences such as enforcement actions and regulatory investigations against us, fines, public censure, claims for damages by end-customers and other affected individuals, damage to our reputation and loss of goodwill (both in relation to existing end-customers and prospective end-customers), any of which could have a material adverse effect on our operations, financial performance, and business. Evolving and changing definitions of personal data and personal information, within the E.U., the United States, and elsewhere, especially relating to classification of Internet Protocol (“IP”) addresses, machine identification, 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. Even the perception of 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.

Risks Related to Operations Outside the United States

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

As a result of various of our acquisitions, including Secdo, PureSec and Twistlock, we have offices and employees located in Israel. Accordingly, political, economic, and military conditions in Israel directly affect our operations. The future of peace efforts between Israel and its Arab neighbors remains uncertain. There has been a significant increase in hostilities and political unrest between Hamas and Israel in the past few years. The effects of these 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. 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 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.

Risk Related to Need for Additional Capital

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 raise additional equity or equity-linked financing, our stockholders may experience significant dilution of their ownership interests and the market price of our common stock could decline. For example, in July 2018, we issued our 2023 Notes (the "2023 Notes") and in June 2020 we issued our 2025 Notes (the "2025 Notes"). Any conversion of the outstanding 2023 Notes and 2025 Notes (the "2023 Notes," together with the "2025 Notes," the "Notes") into common stock will dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of such Notes. See the risk factor entitled "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 all other stockholders." The holders of our Notes have priority over holders of our common stock, and if we engage in future debt financings, the holders of such additional debt would also 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. We may also 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. We may not be able to obtain additional financing on terms favorable to us, if at all. 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.

Tax, Accounting, Compliance and Regulatory Risks

We have a corporate structure aligned with the international nature of our business activities, and if we do not achieve increased tax benefits as a result of our corporate structure, our financial condition and operating results could be adversely affected.

We have reorganized our corporate structure and intercompany relationships to more closely align with the international nature of our business activities. This corporate structure may allow us to reduce our overall effective tax rate through changes in how we use our intellectual property, international procurement, and sales operations. This corporate structure may also allow us to obtain financial and operational efficiencies. These efforts require us to incur expenses in the near term for which we may not realize related benefits. If the structure is not accepted by the applicable tax authorities, if there are any changes in, or interpretations of, domestic and international tax laws that negatively impact the structure, or if we do not operate our business consistent with the structure and

applicable tax provisions, we may fail to achieve the reduction in our overall effective tax rate and the other financial and operational efficiencies that we anticipate as a result of the structure and our future financial condition and operating results may be negatively impacted. In addition, we continue to evaluate our corporate structure in light of current and pending tax legislation, and any changes to our corporate structure may require us to incur additional expenses and may impact our overall effective tax rate.

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 other jurisdictions, are subject to interpretation and certain jurisdictions may aggressively interpret their laws 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 technology or intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position and operating results. It is possible that tax authorities may disagree with certain positions we have taken, and any adverse outcome of such a review or audit could have a negative effect on our financial position and operating results. Further, the determination of our worldwide provision for 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 in our condensed 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 in the United States or in 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 financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in 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, including uncertainty in the current economic environment due to COVID-19, 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.

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 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. 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.

If we fail to comply with environmental requirements, our business, financial condition, operating results, and reputation could be adversely affected.

We are subject to various environmental laws and regulations including laws governing the hazardous material content of our products and laws relating to the collection of and recycling of electrical and electronic equipment. Examples of these laws and regulations include the E.U. Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive (“RoHS”) and the E.U. Waste Electrical and Electronic Equipment Directive (“WEEE Directive”), as well as the implementing legislation of the E.U. member states. Similar laws and regulations have been passed or are pending in China, South Korea, Norway, and Japan and may be enacted in other regions, including in the United States, and we are, or may in the future be, subject to these laws and regulations.

The E.U. RoHS and the similar laws of other jurisdictions limit the content of certain hazardous materials such as lead, mercury, and cadmium in the manufacture of electrical equipment, including our products. Our current products comply with the E.U. RoHS

requirements. However, if there are changes to this or other laws (or their interpretation) or if new similar laws are passed in other jurisdictions, we may be required to reengineer our products to use components compatible with these regulations. This reengineering and component substitution could result in additional costs to us or disrupt our operations or logistics.

The WEEE Directive requires electronic goods producers to be responsible for the collection, recycling, and treatment of such products. Changes in interpretation of the directive may cause us to incur costs or have additional regulatory requirements to meet in the future in order to comply with this directive, or with any similar laws adopted in other jurisdictions.

We are also subject to environmental laws and regulations governing the management of hazardous materials, which we use in small quantities in our engineering labs. Our failure to comply with past, present, and future similar laws could result in reduced sales of our products, substantial product inventory write-offs, reputational damage, penalties, and other sanctions, any of which could harm our business and financial condition. We also expect that our products will be affected by new environmental laws and regulations on an ongoing basis. To date, our expenditures for environmental compliance have not had a material impact on our operating results or cash flows, and although we cannot predict the future impact of such laws or regulations, they will likely result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how they are manufactured, which could have a material adverse effect on our business, operating results, and financial condition.

Risks Related to Potential Catastrophic Events

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 geo-political unrest could affect our supply chain, manufacturers, logistics providers, channel partners, or 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.

Risks Related to Our Notes

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 will need to make cash payments (1) if holders of our Notes require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change (e.g. a change of control of Palo Alto Networks, Inc.) before the maturity date, (2) upon conversion of our Notes, (3) to repay our Notes in cash at their maturity, unless earlier converted or repurchased. However, we may not have enough available cash or be able to obtain financing at the time we are required to make payments.

In addition, our ability to repurchase or to pay cash upon conversion of our Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase our Notes at a time when the repurchase is required by the applicable indenture governing such Notes or to pay cash upon conversion of such 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 Notes or to pay cash upon conversion 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.

We and our subsidiaries may be able to incur substantial additional debt in the future, subject to the restrictions contained in our debt instruments, some of which may be secured debt. We are not restricted under the terms of the indenture governing our Notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of such indenture governing our Notes that could have the effect of diminishing our ability to make payments on our Notes when due. While the terms of any future indebtedness we may incur could restrict our ability to incur additional indebtedness, any such restrictions will indirectly benefit holders of our Notes only to the extent any such indebtedness or credit facility is not repaid or does not mature while our Notes are outstanding.

Risks Related to Our Common Stock

Our actual operating results may differ significantly from our guidance.

From time to time, we have released, and may continue to release, guidance in our quarterly earnings releases, quarterly earnings conference calls, or otherwise, regarding our future performance that represents our management's estimates as of the date of

release. This guidance, which includes forward-looking statements, has been and will be based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person expresses any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control, such as COVID-19, and are based upon specific assumptions with respect to future business decisions, some of which will change. The rapidly evolving market in which we operate may make it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We intend to state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed. However, actual results will vary from our guidance and the variations may be material. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook as of the date of release with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons. Investors are urged not to rely upon our guidance in making an investment decision regarding our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this “Risk Factors” section in this Quarterly Report on Form 10-Q could result in our actual operating results being different from our guidance, and the differences may be adverse and material.

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

The market price of our common stock has been volatile since our initial public offering (“IPO”) in July 2012. The reported high and low sales prices of our common stock during the last 12 months have ranged from \$125.47 to \$275.03, as measured through November 13, 2020. The market price of our common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include:

- 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, such as COVID-19;
- sales or repurchases of large blocks of our common stock or substantial future sales by our directors, executive officers, employees and significant stockholders;
- sales of our common stock by investors who view our Notes as a more attractive means of equity participation in us;
- hedging or arbitrage trading activity involving our common stock as a result of the existence of our Notes;
- departures of key personnel; or
- economic uncertainty around the world.

The market price of our common stock could decline for reasons unrelated to our business, operating results, or financial condition and as a result of events that do not directly affect us. 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 and divert our management's attention and resources from our business. This could 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 2023 Notes and 2025 Notes, we entered into convertible note hedge transactions (the "Note Hedges") with certain counterparties. In connection with each such sale of the Notes, we also entered into warrant transactions with the counterparties pursuant to which we sold warrants (the "Warrants") for the purchase of our common stock. The Note Hedges for our 2023 Notes and 2025 Notes are expected generally to reduce the potential dilution to our common stock upon any conversion of our Notes and/or offset any cash payments we are required to make in excess of the principal amount of any such converted 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 Notes (and are likely to do so during any applicable observation period related to a conversion of our Notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or our Notes, which could affect a note holder's ability to convert its Notes and, to the extent the activity occurs during any observation period related to a conversion of our Notes, it could affect the amount and value of the consideration that the note holder will receive upon conversion of our 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 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 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 Notes, the settlement of our Warrants related to each such series of the Notes, 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.

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program which will be funded from available working capital. The repurchase authorization will expire on December 31, 2020. 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 are subject to risks associated with our strategic investments. Impairments in the value of our investments could negatively impact our financial results.

In July 2017, we formed the \$20.0 million Palo Alto Networks Venture Fund. The fund is aimed at seed-, early-, and growth-stage security companies with a cloud-based application approach. We may not realize a return on our capital investments. Many such private companies generate net losses and the market for their products, services or technologies may be slow to develop, and, therefore, are dependent on the availability of later rounds of financing from banks or investors on favorable terms to continue their operations. The financial success of our investment in any company is typically dependent on a liquidity event, such as a public offering, acquisition or other favorable market event reflecting appreciation in the cost of our initial investment. The capital markets for public offerings and acquisitions are dynamic and the likelihood of liquidity events for the companies we have invested in, and intend to invest in, could significantly change. Further, valuations of privately-held companies are inherently complex due to the lack of readily available market data and as such, the basis for these valuations is subject to the timing and accuracy of the data received from these companies. If we determine that any of our investments in such companies have experienced a decline in value, we may be required to record an impairment, which could be material and negatively impact our financial results. All of our investments are subject to a risk of a partial or total loss of investment capital.

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, you may only receive a return on your investment 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 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 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

The requirements of being a public company may strain our resources, divert management's attention, and affect our ability to attract and retain qualified board members.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of the New York Stock Exchange ("NYSE"), and other applicable securities rules and regulations. Compliance with these rules and regulations have increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly, and increased demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly, and current reports with respect to our business and operating results. In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to meet the requirements of this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and operating results. Although we have already hired additional employees to comply with these requirements, we may need to hire even more employees in the future, which will increase our costs and expenses.

In addition, changing laws, regulations, and standards related to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more time-consuming. These laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and

governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations, and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

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 this 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.

While we were able to determine in our management's report for fiscal 2020 that our internal control over financial reporting is effective, as well as provide an unqualified attestation report from our independent registered public accounting firm to that effect, we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion, may be unable to assert that our internal controls are effective, or our independent registered public accounting firm may not be able to formally attest to the effectiveness of our internal control over financial reporting in the future. In the event that our chief executive officer, chief financial officer, or independent registered public accounting firm determines in the future 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 and causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our stock.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

The following table summarizes stock repurchases during the three months ended October 31, 2020 (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, 2020 to August 31, 2020 ⁽²⁾	0.0	\$ 256.20	0.0	\$ 801.9
September 1, 2020 to September 30, 2020 ⁽²⁾	2.0	\$ 242.23	2.0	\$ 313.5
October 1, 2020 to October 31, 2020 ⁽²⁾	0.1	\$ 245.69	0.1	\$ 301.9
Total	2.1	\$ 242.38	2.1	

(1) On February 26, 2019, we announced that our board of directors authorized a \$1.0 billion share repurchase program which will be funded from available working capital. 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. The repurchase authorization will expire on December 31, 2020, and may be suspended or discontinued at any time.

(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 6. EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.1 *	Employment Agreement between Palo Alto Networks (Israel Analytics) Ltd. and Nir Zuk, dated August 18, 2020.				
10.2 *	Crypsis Group Holdings, LLC 2017 Equity Incentive Plan	S-8	333-249387	99.1	October 8, 2020
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, 2020 formatted in Inline XBRL includes: (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations, (iii) Condensed Consolidated Statements of Comprehensive 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).				

* Indicates a management contract or compensatory plan or arrangement.

† 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 19, 2020

PALO ALTO NETWORKS, INC.

By: /s/ LUIS FELIPE VISOSO
Luis Felipe Visoso
Chief Financial Officer
(Duly Authorized Officer and Principal Financial Officer)

Date: November 19, 2020

PALO ALTO NETWORKS, INC.

By: /s/ JEAN COMPEAU
Jean Compeau
Chief Accounting Officer
(Duly Authorized Officer and Principal Accounting Officer)

EMPLOYMENT AGREEMENT

THIS AGREEMENT is entered into as of the date of the last signature,

By and between: **Palo Alto networks (Israel Analytics) Ltd.**, Company ID No. 514668920 (the “**Company**”) and **Nir Zuk**, (the “**Employee**”).

1. Position; Commencement Date

(a) The Employee shall be employed by the Company in the position of Chief Technology Officer (the “**Position**”) commencing retroactively as of 17 August 2020 (the “**Commencement Date**”). The Company may change Employee’s title from time to time and/or request the Employee to undertake the duties and undertake the responsibilities as determined from time to time which are compatible with his office, qualifications or professional category, in accordance with applicable law.

(b) The Employee shall be initially under the direct supervision of and comply with the directives of the Chief Executive officer and/or any such individual designated by the Company at its sole discretion (the “**Supervisor**”).

(c) The Employee's continuous employment at Palo Alto Networks Inc. as from 3 February 2005 shall be considered his original commencement of employment with the Company, with respect to Company policy benefits that are service-based, such as annual leave and service award.. Such Service credit does not apply to retirement plans, unless otherwise required by collective bargaining agreement or national labor laws. For the avoidance of doubt, for the purpose of calculating statutory rights under applicable governing law (including severance pay under the Severance Pay Law – 1963), the Employee's seniority shall be as stated in the Commencement Date in subsection (a) above.

2. Working Time

(a) Unless mutually agreed otherwise by the parties, work for the Company shall be performed on Sunday through Thursday. Saturday (Shabbat) is official rest day. Employee shall provide a minimum of 44.5 working time hours per week, in compliance with the shortened day as prescribed in the Employee Handbook and including a thirty (30) minute daily break to be taken under the Employee's responsibility.

(b) The Employee may work outside of regular working hours and working days as may be required to fulfill the Employee’s duties and responsibilities. Therefore, the Employee shall be paid on a monthly basis, in addition to the Employee's Base Salary, a global amount as payment for forty (40) global work hours per month (the “**Overtime Quota**”). The Overtime Quota is determined according to an estimation of Employee’s scope of work. The Overtime Payment (as defined below) will be payable regardless of actual overtime hours performed and no deductions will be made from the Employee’s Salary if the Overtime Quota is not reached. The Employee

must notify the Company in writing if this Overtime Quota is to be exceeded and obtain the Company's prior approval to perform work in excess of the Overtime Quota.

3. **Employee's Warranties**

The Employee hereby represents and undertakes to the Company all of the following:

- (a) The Employee represents and warrants to the Company that, by entering into this Agreement or performing any of his/her obligations under it, he/she will not be in breach of any court order or any express or implied terms of any contract or other obligation binding on him/her.
- (b) This contract is conditioned upon the Employee's ability to perform the Employee's services without infringing any non-compete covenant or similar covenants and/or agreements.
- (c) The Employee warrants that he/she is entitled to work in Israel without any additional approvals and will notify the Company immediately if he/she ceases to be so entitled during this Agreement.

4. **Remuneration**

- (a) The Company agrees to pay or cause to be paid to the Employee during the term of this Agreement a gross salary of ILS 98,800 (Ninety-Eight Thousand Eight Hundred New Israeli Shekels) per month (the "**Base Salary**"). On account of the hours included in the Overtime Quota as defined in Section 2(a) above, the Company agrees to pay to the Employee a gross payment of ILS 24,700 (Twenty-Four Thousand Seven Hundred New Israeli Shekels) per month (the "**Overtime Payment**"). The Base Salary and the Overtime Payment constitute together the "**Salary**". The Salary shall be payable monthly in arrears.
- (b) An amount equal to 10% of the Salary shall be considered as a special compensation paid for the Employee's obligations set forth in the Invention Agreement and Non-Compete & Non-Solicitation Agreement referred to in Section 6(a) below (the "**Special Compensation**."). The Special Compensation is part of the Salary and not in addition to the Salary.
- (c) The Salary will be paid no later than the 9th day of each month, one month in arrears, subject to all applicable withholdings.
- (d) Employee is eligible to participate in the Palo Alto Networks Variable Incentive Plan ("**VIP**" or "**Plan**") as applicable from time to time. Employee is eligible for a VIP target of 100% of Salary per annum as per Plan. Employee acknowledges that the Company reserves the discretion to change the terms and conditions of the Plan at any time. The granting of the VIP bonus is at Company's sole and absolute discretion. The granting of a VIP bonus in any given year or during several years will not create a precedent for any subsequent years. No disbursements will be made to Managers Insurance or Education Fund with respect to any VIP bonus payments, and will not be deemed a portion of the Employee's Salary for any purpose, including without limitation, when calculating the Employee's entitlement to severance pay or other amounts payable upon termination of the Employee's employment.

(e) The Employee agrees to receive all his/her pay slips in a non-alterable electronic format at the electronic address indicated in writing to HRConnect within 10 days as of the Commencement Date. In absence of indication in writing of a specific email address, the electronic pay slips will be delivered to the personal paloahtonetworks.com address of the Employee.

(f) If at any time during employment, or upon its termination (however arising), money is owed and payable by the Employee to the Company, whether under this Agreement or otherwise, it is agreed that the Company may deduct, in accordance with applicable law and regulation, the sum or sums from time to time owed to it from any payment due to the Employee from the Company howsoever arising.

5. Employee Benefits

The Employee will be entitled to all benefits mandatory by law and which may be applicable to the Employee according to the Company's benefits program applicable from time to time.

(a) Pension Plan.

(i) Pension Plan. The Company contributes to a fund for severance payments, as described below:

(ii) The Company will contribute an amount equivalent to 6.5% of the Salary (the "Company Contribution"). The Company Contribution in case of Managers Insurance or Non-Pension Policy, will include an amount required to secure at least 75% of the Insured Salary, and in any case the Company contribution to the benefits account of the Policy will be no less than 5% of the Insured Salary. In addition, the Company Contribution to Occupational Disability and the Company Contribution to benefits account of the Policy, all together, will not exceed 7.5% of the Insured Salary.

(iii) The Employee will contribute no less than 6% of the Salary so allocated toward the premiums payable.

(iv) The Company will pay an amount equal to 8-1/3% of the portion of the Salary towards a fund for severance payments. These payments come under the obligation of paying full severance payments and with accordance to Section 14 to the Israeli Severance Compensation Law of 1963. Parties shall sign the General Order and Confirmation Regarding Payments of Employers to Pension Funds and Insurance Funds instead of Severance Pay attached hereto as Exhibit A.

(d) The Company hereby waives in advance any claim it has or may have to be refunded any of the payments made to the Pension Plan, unless (1) the Employee's right to severance pay is invalidated by a court ruling on the basis of Sections 16 or 17 of the Law (and in such case only to the extent it is invalidated), or (2) the Employee withdrew funds from the manager's insurance policy for reasons other than an "Entitling Event". An "Entitling Event" means death, disability or retirement at the age of 60 or more.

- (e) Sick Leave. The Employee will be entitled to sick leave as provided by law and if more favorable, as provided by the Company's policies. The Company's policies currently provide for sick leave pay equivalent to 100% of Salary as of the first day of sick leave.
- (f) Annual Recreation Allowance (Dme'i Havra'a). The Employee shall be entitled to annual recreation allowance, according to the applicable directive.
- (g) Vacation. According to Company policy, the Employee shall be entitled to a minimum annual vacation equivalent to 18 working days, regardless of seniority and thereafter to the legal annual leave duration as prescribed based on seniority.
- (h) Educational Fund (Keren Hishtalmut). The Employee expressly waives his right to the Educational Fund and accepts that the Company will not contribute, nor collect contributions from the Employee for payment, to a recognized educational fund.
- (i) Business Expenses. The Employee shall be entitled to reimbursement of travel expenses, as required by the law and in accordance with the Company's Travel and Business Expense Policy.
- (j) Cellular Phone. If the Employee joins the Company's cellular plan, the Employee shall be responsible for payment of taxes associated with such benefit.

6. **Duties**

- (a) As condition precedent to the effectiveness of this Agreement, the Employee agrees on and has signed and dated the side agreement(s) attached hereto.
- (b) The Employee understands that the Employee is required to abide by the provisions of the United States Foreign Corrupt Practices Act ("FCPA"), the UK Bribery Act of 2010, Title 5 of the Israeli Penalty Law, 2000, and all other applicable laws prohibiting foreign bribery and improper payments. The Employee agrees to comply with the FCPA, the UK Bribery Act of 2010, and all applicable laws, regulations, and governmental orders of Israel, UK and the United States, now or hereafter in effect, relating to the Employee's employment by the Company.
- (c) The Employee shall report his/her own wrongdoing and any wrongdoing or proposed wrongdoing of any other employee or director of the Company or any Group Company to ethics@paloaltonetworks.com immediately on becoming aware of it.
- (d) The Employee shall strictly comply with the Company's Employee Handbook, Code of Business Conduct and Ethics, IT Acceptable Use Policy, Prevention of Harassment Policy, and rules, policies and procedures, a copy of which is available from the HR department. The Company's employee handbook, codes and policies, as amended from time to time, apply and the Company may amend them at any time in its sole discretion without prior notice. To the extent that there is any conflict between the terms of this Agreement, the Employee Handbook and the policies, this Agreement shall prevail.

(e) Unless prevented by incapacity, the Employee shall devote the whole of his/her work time, attention and abilities to the business of the Company. The Employee undertakes to promptly notify the Company regarding any matter or subject in respect of which the Employee has a personal interest and/or which might create a conflict of interest with the Employee's position in the Company. During the term of this Agreement, the Employee shall neither be engaged in any other employment nor directly or indirectly engage in any other business activities in any capacity for any other person, firm or company whether or not for consideration, without the express prior written consent of the Company.

7. Term and Termination

7.1 The term of employment under this Agreement will continue for unlimited period unless terminated upon a 30 days' written sent to the other party (the "**Notice Period**").

7.2 Release of Duties; Paid in Lieu of Notice. The Company is entitled, at any time prior to the expiration of the applicable Notice Period: (i) to release the Employee from the execution of his or her duties and responsibilities during said Notice Period in which event the Company shall continue to pay to the Employee the payments referred to under Section 4 above; or (ii) to immediately terminate this Employment Agreement at any time prior to the expiration of said Notice Period in which event the Company shall pay the Employee upon the early termination date the value of the Salary corresponding to the remainder of such Notice Period.

7.3 Termination for Cause. The Company may terminate this Employment Agreement forthwith with immediate effect at any time without any Notice Period or any compensation in lieu of Notice Period and/or severance pay (subject to applicable law), if the Employee (amongst other things):

- (a) breaches the Company's anti-corruption and bribery policy and related procedures;
- (b) is guilty of dishonesty, or other gross misconduct, or gross incompetence or willful neglect of duty, excessive unexcused absenteeism, intentional damage of a substantial amount of the Company's property or commits any other serious breach of the terms of this employment;
- (c) acts in any manner (whether in the course his/her duties or otherwise) which the Company believes is likely to bring the Employee, the Company and/or any Group Company into disrepute or prejudice the interests of the Company or any Group Company;
- (d) is convicted of a criminal offence, other than a motoring offence which does not result in imprisonment;
- (e) fails to comply with a lawful instruction given by his/her manager or on behalf of the Company and/or to comply with Company's Code of Business Conduct, Prevention of Harassment Policy, Employer's Insider Trading Policy or any rules, policies and procedures issued by the Employer from time to time, as specified by the Board or the Chief Executive Officer after being provided with notice of such failure, such notice specifying in reasonable detail the tasks which must be accomplished and a timeline for the accomplishment and an opportunity to cure within thirty (30) days of receipt of such notice.

(f) commits any breach or non-observance of one or more of the following agreements between the Employee and the Company: the Invention Agreement, the Non-Disclosure Agreement, the Non-Competition & Non-Solicitation Agreement, if any;

(g) loses the right to work in Israel; or

(h) any other circumstances under which severance pay may be denied, in whole or in part, upon termination of employment under applicable law.

7.4 Termination Following a Change in Control. In the event that there is a Change in Control of the Company and the Company or its successor terminates the Employee's employment other than for Cause (as defined above), or the Employee terminates his employment for Good Reason, in either case upon or within twelve (12) months following the Change in Control, the Employee will be entitled to receive:

7.4.1 a lump-sum payment equal to your then-current annual base salary, 100% of your target bonus for that fiscal year; and

7.4.2 acceleration of the vesting of the greater of:

(a) twelve (12) months vesting of the Employee's then outstanding unvested time-based equity awards, or

(b) fifty percent (50%) of the Employee's then outstanding unvested time-based equity awards (for the avoidance of doubt, the greater of under this sub-section (ii) will be determined on an award by award basis) (collectively, the "**Change in Control Severance Benefits**").

7.5 Form and Timing of Payment. The sub-section 7.4 above will not apply unless the Employee (i) has returned all Company property in his possession, in accordance with section 8 below (ii) have resigned as a member of the Board of the Company, its Parent and all of its subsidiaries, to the extent applicable, and (iii) have executed a general release of all claims that the Employee may have against the Company or persons affiliated with the Company. The release must be in the form prescribed by the Company. The Employee must execute and return the release on or before the date specified by the Company in the prescribed form (the "**Release Deadline**"). The Release Deadline will in no event be later than 50 days after the Employee's separation. If the Employee fails to return the release on or before the Release Deadline, or if you revoke the release, then the Employee will not be entitled to the benefits described in sub-section 7.4 above. The Change in Control Severance Benefits will be paid in lump sum following the effectiveness of the release within 60 days after the Employee's separation. Notwithstanding the foregoing, if the 60-day period described in the preceding sentence spans two calendar years and/or if the Employee's Change in Control Severance Benefits are Deferred Payments (as defined below), then the payments will be paid in lump sum on the 60th day following the Employee's termination of employment, subject to section 7.6 below.

7.6 Section 280G. If any payments and other benefits provided for in this Agreement or otherwise constitute "parachute payments" within the meaning of Section 280G of the US

Internal Revenue Code and, but for this section 7.6, would be subject to the excise tax imposed by Section 4999 of the US Internal Revenue Code, then payments and other benefits will be payable to the Employee either in full or in such lesser amounts as would result, after taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, on the Employee's receipt on an after-tax basis of the greatest amount of payments and other benefits, by reducing payments in the following order: (i) cancellation of accelerated vesting of stock options that are out-of-the-money; (ii) reduction in cash payments; (iii) cancellation of accelerated vesting of all equity awards that are not out-of-the-money stock options; and (iv) other employee benefits. In the event that acceleration of vesting of equity award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant.

7.7 Section 409A. For purposes of this Agreement, a termination of employment will be determined consistent with the rules relating to a "separation from service" as defined in Section 409A of the US Internal Revenue Code and the regulations thereunder ("Section 409A"). Notwithstanding anything else provided herein, to the extent any payments provided under this Agreement in connection with the Employee's termination of employment constitute deferred compensation subject to Section 409A ("Deferred Payments"), and the Employee is deemed at the time of such termination of employment to be a "specified employee" under Section 409A, then such payment shall not be made or commence until the earlier of (i) the expiration of the six (6)-month period measured from the Employee's separation from service from the Company or (ii) the date of the Employee's death following such a separation from service; provided, however, that such deferral shall only be effected to the extent required to avoid adverse tax treatment to the Employee including, without limitation, the additional tax for which the Employee would otherwise be liable under Section 409A(a)(1)(B) in the absence of such a deferral. To the extent that any provision of this Agreement is ambiguous as to its compliance with Section 409A, the provision will be read in such a manner so that all payments hereunder comply with Section 409A. To the extent any payment under this Agreement may be classified as a "short-term deferral" within the meaning of Section 409A, such payment shall be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section 409A. Payments pursuant to this Agreement are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

7.8 Definitions.

i. For purposes of this Agreement, "**Good Reason**" shall mean: (a.) a material reduction in the Employee's authority, status, obligations or responsibilities, provided that following a Change in Control a change in title alone (not accompanied by a change in authority, status, obligations or responsibilities) shall not constitute a material reduction; (b.) a reduction of the Employee's total annual compensation of more than 10% unless such reduction is no greater (in percentage terms) than compensation reductions imposed on substantially all of the Company's employees pursuant to a directive of the Board; (c.) any failure by the Company to pay the Employee's base salary; or (d.) the relocation of the principal place of the Company's business to a location that is more than thirty-five (35) miles further from the Employee's home than before the relocation. The Employee's resignation must occur within 12 months after one of the foregoing conditions has come into existence without the Employee's consent. A resignation for Good Reason will not be

deemed to have occurred unless the Employee gives the Company written notice of the condition within 90 days after the condition comes into existence and the Company fails to remedy the condition within 30 days after receiving the Employee's written notice.

ii. For purposes of this Agreement, "**Change in Control**" shall mean: (a.) the sale or other disposition of all or substantially all of the assets of the Palo Alto Networks, Inc. (b.) any sale or exchange of the capital stock of the Company by the stockholders of the Company in one transaction or series of related transactions where more than fifty percent (50%) of the outstanding voting power of the Company is acquired by a person or entity or group of related persons or entities; (c.) any reorganization, consolidation or merger of the Company where the outstanding voting securities of the Company immediately before the transaction represent or are converted into less than fifty percent (50%) of the outstanding voting power of the surviving entity (or its parent corporation) immediately after the transaction; or (d.) the consummation of the acquisition of fifty-one percent (51%) or more of the outstanding stock of the Company pursuant to a tender offer validly made under any federal or state law (other than a tender offer by the Company). Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A of the US Internal Revenue Code.

8. **Return of Company Property**

Upon cessation of employment, for whatever reason, the Employee must immediately:

(a) return to the Company all documents, notes, projects, copies or duplicates belonging to the Company in his/her possession or under his/her control or which became known to the Employee when performing his/her activity, on whatever media and wherever located, relating to the business or affairs of the Employer and any Group Company, without being requested to do so. The Company does not confer upon the Employee any right of retention of any such documents, under any circumstances;

(b) deliver to Company all building badges and any similar identification, and any other Palo Alto Networks-owned or Palo Alto Networks-leased property in his/her possession or control leaving intact all electronic Palo Alto Networks documents, records and files, including but not limited to those that he/she developed or helped to develop during this employment;

(c) after complying with the above (if applicable) irretrievably delete any information relating to the business of Company stored on any personal magnetic or optical disk or personal memory or device and all matter derived from such sources which is in his/her possession or under his/her control;

(d) cancel all accounts for his/her benefit, if any, in the Company's name, including but not limited to, credit cards, telephone charge cards, cellular phone and/or pager accounts and computer accounts;

(e) transfer to the Company all rights in and control over (including all logins, passwords and the like) any and all accounts, social media accounts, subscriptions and/or registrations, electronic or otherwise, that he/she opened and/or maintained in his/her own name, but on behalf

of or for the benefit of Company, during the course of his/her employment and not to access or do anything that may directly or indirectly inhibit or prevent Company from accessing any and all of these accounts, social media accounts, subscriptions and/or registrations;

(f) return the working tools that are property of the Company.

9. **Successors and Assigns**

(a) This Agreement shall be binding upon and shall inure to the benefit of the Company, its successors and assigns.

(b) Neither this Agreement nor any right or interest hereunder shall be assignable or transferable by the Employee, his beneficiaries or legal representatives, except by will or by the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Employee's legal personal representative.

10. **Miscellaneous**

No provision of this Agreement may be modified, waived or discharged unless such waiver, modification or discharge is agreed to in writing and signed by the Employee and the Company. No waiver by either party hereto at any time of any breach by the other party hereto of, or compliance with, any condition of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreement or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which is not expressly set forth in this Agreement. This Agreement shall not be modified or otherwise affected by unwritten "customs" under Israeli employment law, or other terms effective for other employees of the Company.

11. **Governing Law**

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Israel.

12. **Severability**

In the event that any provision of this Agreement is held invalid or unenforceable in any circumstances by a court of competent jurisdiction, the remainder of this Agreement, and the application of such provision in any other circumstances, shall not be affected thereby, and the unenforceable provision enforced to the maximum extent permissible under law, or otherwise shall be replaced by an enforceable provision that most nearly approximates the intent of the unenforceable provision.

13. **Entire Agreement**

(a) This Agreement, its annex A, the Non-Disclosure Agreement, the Invention Agreement and the Privacy Notice constitutes the entire agreement between the parties hereto and

supersedes all prior agreements, understandings and arrangements, oral or written, between the parties hereto with respect to the subject matter hereof.

(b) This Agreement, its annex A, the Non-Disclosure Agreement, the Invention Agreement and the Privacy Notice constitute notice to the Employee pursuant to the Notice to Employee (Employment Terms) Law – 2002.

Palo Alto networks (Israel Analytics) Ltd.

Nir Zuk

By: _____
Name: Praveen Krishnamurthy
Title: VP, Talent Acquisition

Dated:

Dated:

By: /s/ Praveen Krishnamurthy _____
Name: Praveen Krishnamurthy
Title: VP, Talent Acquisition
Dated: 2020-08-18

/s/ Nir Zuk _____
Dated: 2020-08-18

EXHIBIT A

General Order and Confirmation Regarding Payments of Employers to Pension Funds and Insurance Funds instead of Severance Pay

Pursuant to the power granted to me under section 14 of the Severance Pay Law 5723-1963 (“**Law**”) I hereby confirm that payments paid by an employer, commencing the date hereof, to an employee’s comprehensive pension fund into a provident fund which is not an insurance fund, as defined in the Income Tax Regulations (Registration and Management Rules of a Provident Fund) 5724-1964 (“**Pension Fund**”), or to a Manager’s Insurance Fund that includes the possibility of an allowance or a combination of payments to an Allowance Plan and to a plan which is not an Allowance Plan in an Insurance Fund (“**Insurance Fund**”), including payments which the employer paid by combination of payments to a Pension Fund and to an Insurance Fund whether there exists a possibility in the Insurance Fund to an allowance plan (“**Employer Payments**”), will replace the severance pay that the employee is entitled to for the salary and period of which the payments were paid (“**Exempt Wages**”) if the following conditions are satisfied:

(1) Employer Payments –

(A) for Pension Funds are not less than 14.33 % of the Exempt Wages or 12% of the Exempt Wages, if the employer pays for his employee an additional payment on behalf of the severance pay completion for a providence fund or Insurance Fund at the rate of 2.33% of the Exempt Wages. If an employer does not pay the additional 2.33% on top of the 12%, then the payment will constitute only 72% of the Severance Pay.

(B) to the Insurance Fund are not less that one of the following:

(1) 13.33% of the Exempt Wages if the employer pays the employee additional payments to insure his monthly income in case of work disability, in a plan approved by the Supervisor of the Capital Market, Insurance and Savings in the Finance Ministry, at the lower of, a rate required to insure 75% of the Exempt Wages or 2.5% of the Exempt Wages (“**Disability Payment**”).

(2) 11% of the Exempt Wages if the employer pays an additional Disability Payment and in this case the Employer Payments will constitute only 72% of the employee’s severance pay; if, in addition to the abovementioned sum, the employer pays 2.33% of the Exempt Wages for the purpose of Severance Pay completion to providence fund or Insurance Funds, the Employer Payments will constitute 100% of the severance pay.

(2) A written agreement must be made between the employer and employee no later than 3 months after the commencement of the Employer Payments that include –

(A) the agreement of the employee to the arrangement pursuant to this confirmation which details the Employer Payments and the name of the Pension Fund or Insurance Fund; this agreement must include a copy of this confirmation;

(B) an advanced waiver of the employer for any right that he could have to have his payments refunded unless the employee's right to severance pay is denied by judgment according to sections 16 or 17 of the Law, and in case the employee withdrew monies from the Pension Fund or Insurance Fund not for an Approved Event; for this matter, Approved Event or purpose means death, disablement or retirement at the age of 60 or over.

(3) This confirmation does not derogate from the employee's entitlement to severance pay according to the Law, Collective Agreement, Extension Order or personal employment agreement, for any salary above the Exempt Wages.

ACKNOWLEDGED AND AGREED:

/s/ Nir Zuk

Date: 2020-08-18

Invention Agreement

This Agreement is made between **Palo Alto networks (Israel Analytics) Ltd.**, legally represented by Mr. Praveen Krishnamurthy , hereinafter referred to as “**Company**” and (the “**Employee**”).

1. The Employee will make full and prompt disclosure to the Company of all inventions, improvements, discoveries, methods, developments, software, graphic designs and works of authorship, whether patentable or not, which are created, made, conceived or reduced to practice by him/her or under his/her direction or jointly with others during his/her employment by the Company (all of which are collectively referred to in this Agreement as “**Developments**”). This paragraph 1 shall not apply to Developments which do not relate to the present or planned business or research and development of the Company and which are made and conceived by the Employee not during normal working hours, not on the Company’s premises and not using the Company’s tools, devices, equipment or Proprietary Information. However, the Company reserves the right to request at any time that the Employee makes full disclosure to the Company of all Developments created, made, conceived or reduced to practice by the Employee during a specific period of time, such period of time to be specified in a request notification. The Employee agrees to execute and complete these ad hoc disclosures upon written request of the Company.

e Employee expressly acknowledges that the Company has the exclusive and unlimited right to make use of all Developments that may be protected by the Patent Law of Israel dated 1967 (the “**Patent Law**”) in respect of the protection of software, or any other intellectual property legislation in force, and agrees to transfer said rights to the Company or third parties in accordance with the Company’s directions.

3. All Developments shall be deemed, to the extent applicable, “**Service Inventions**” as defined in the Patent Law, it being clarified that under no circumstances will I be deemed to have any proprietary right in any such Service Inventions, notwithstanding the provision or non-provision of any notice of an invention and/or company response to any such notice, under Section 132(b) of the Patent Law. This Agreement is expressly intended to be an agreement with regard to the terms and conditions of consideration for Service Inventions in accordance with Section 134 of the Patent Law. The Employee further acknowledges and agrees that he or she will not be entitled to additional royalties, consideration or other payments with regard to any Service Inventions or any of the intellectual property rights set forth above, including any commercialization thereof or other intellectual property rights, and do hereby explicitly, irrevocably and unconditionally waive the right to receive any such additional royalties, consideration or other payments including but not limited to, any claims for consideration, compensation or royalty pursuant to Section 134 of the Patent Law.

4. The Employee expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any subsidiary or affiliate thereof to whose employ the Employee may be transferred without the necessity that this Agreement be re-signed at the time of such transfer.

5. This Agreement supersedes all prior agreements, written or oral, between the Employee and the Company relating to the subject matter of this Agreement. The Employee agrees that any change or changes in his/her duties, salary or compensation after the signing of this Agreement shall not affect the validity or scope of this Agreement.

ACKNOWLEDGED AND AGREED:

/s/ Nir Zuk

Date: 2020-08-18

Non-Disclosure Agreement

This Agreement is made between **Palo Alto networks (Israel Analytics) Ltd.**, legally represented by Mr. Praveen Krishnamurthy, hereinafter referred to as **"Company"** and (the **"Employee"**).

1. The Employee agrees that all information, whether or not in writing, of a private, secret or confidential nature concerning the Company's business, business relationships or financial affairs (collectively, **"Proprietary Information"**) is and shall be the exclusive property of the Company. By way of illustration, but not limitation, Proprietary Information may include inventions, products, processes, methods, techniques, formulas, compositions, compounds, projects, developments, plans, research data, clinical data, financial data, personnel data, computer programs, customer and supplier lists, and contacts at or knowledge of customers or prospective customers of the Company. The Employee will not disclose any Proprietary Information to any person or entity other than employees of the Company or use the same for any purposes (other than in the performance of his/her duties as an employee of the Company) without written approval by an officer of the Company, either during or after his/her employment with the Company, unless and until such Proprietary Information has become public knowledge without fault by the Employee.
2. The Employee agrees that all files, letters, memoranda, reports, records, data, sketches, drawings, laboratory notebooks, program listings, or other written, photographic, or other tangible material containing Proprietary Information, whether created by the Employee or others, which shall come into his/her custody or possession, shall be and are the exclusive property of the Company to be used by the Employee only in the performance of his/her duties for the Company. All such materials or copies thereof and all tangible property of the Company in the custody or possession of the Employee shall be delivered to the Company, upon the earlier of (i) a request by the Company or (ii) termination of his/her employment. After such delivery, the Employee shall not retain any such materials or copies thereof or any such tangible property.
3. The Employee agrees that his/her obligation not to disclose or to use information and materials of the types set forth in paragraphs (1) and (2) above, and his/her obligation to return materials and tangible property, set forth in paragraph (2) above, also extends to such types of information, materials and tangible property of customers, partners and suppliers to the Company or other third parties who may have disclosed or entrusted the same to the Company or to the Employee.
4. The Employee hereby represents that, except as the Employee has disclosed in writing to the Company, the Employee is not bound by the terms of any agreement with any previous employer or other party to refrain from using or disclosing any trade secret or confidential or Proprietary Information in the course of his/her employment with the Company, to refrain from competing, directly or indirectly, with the business of such previous employer or any other party or to refrain from soliciting employees, customers or suppliers of such previous employer or other party. The Employee further represents that his/her performance of all the terms of this Agreement and the performance of his/her duties as an employee of the Company do not and will not breach any agreement with any prior employer or other party to which the Employee is a party (including without limitation any nondisclosure or non- competition agreement), and that the Employee will not disclose to the Company or induce the Company to use any confidential or proprietary information or material belonging to any previous employer or others.
5. The restrictions contained in this Agreement are necessary for the protection of the business and goodwill of the Company and are considered by the Employee to be reasonable for such purpose. The Employee agrees that any breach of this Agreement is likely to cause the Company substantial and

irrevocable damage. Therefore, breach in any way of the confidentiality duty while this contract is in force shall be considered a serious disciplinary offense.

6. The Employee expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any subsidiary or affiliate thereof to whose employ the Employee may be transferred without the necessity that this Agreement be re-signed at the time of such transfer.

7. This Agreement supersedes all prior agreements, written or oral, between the Employee and the Company relating to the subject matter of this Agreement. The Employee agrees that any change or changes in his/her duties, salary or compensation after the signing of this Agreement shall not affect the validity or scope of this Agreement.

ACKNOWLEDGED AND AGREED:

/s/ Nir Zuk

Date: 2020-08-18

PRIVACY NOTICE AND CONSENT

The Employer (hereinafter referred to also as “Palo Alto Networks”) collects and processes personal data about you. This includes:

- your name, home address, phone number, nationality, employee ID number, national personal ID number, passports and visas, when required, and, where permitted, immigration status;
- photograph(s);
- benefit plans enrollment information, beneficiaries’ details in relation to life insurance or other benefits, emergency contacts, marital status, information about family members (name, date of birth, gender and national personal ID number), where necessary for the provision of applicable benefits, guarantees or relocation assistance;
- job title, compensation, benefits, bank details, professional experience, education, performance history, training records;
- expense records, such as details of out of pocket expenses, corporate credit cards, company cars or private cars, where an allowance is claimed, and mobile phone costs;
- phone, written and electronic communications, where permissible;
- video images recorded by our CCTV cameras, as permitted by applicable law;
- information concerning performance, career plans, conduct and, where permissible, violation of laws or breach of company policies; and
- medical leave information, medical certificates with no diagnosis, other documents required to confer special benefit status, such as information concerning pregnancy status and age of children, etc. where applicable.

Palo Alto Networks will keep this information, together with data retained from the application and selection process, for the course of the employment relationship and, to the extent permitted, after termination of employment.

Palo Alto Networks processes this personal data for the following purposes:

- As required to establish and perform the employment contract, to maintain or terminate the employment relationship and to enable you to perform your job. This includes recruiting and hiring, administration of payroll and benefits, absence, compensation and sales quota commission, performance and talent management, training and leadership development, award recognition, employee surveys, medical insurance, occupational health, retirement plans, stock plans, expense management, and professional travel.
- As required by Palo Alto Networks to enable its business, in particular to provide access to Palo Alto Networks’ offices, management of Palo Alto Networks’ IT systems and infrastructure, inclusion in company directories and provision of communication services such as e-mail, telephone and internet access.
- Protecting the security of Palo Alto Networks’ premises, assets, systems, and intellectual property, enforcing company policies, including monitoring communications, where permitted

by local law and in accordance with Palo Alto Networks' Code of Conduct and privacy and information security policies, and for investigations and disciplinary actions.

- Compliance with applicable laws and protection of Palo Alto Networks' legitimate business interests and legal rights, including, but not limited to, use in connection with legal claims, compliance, regulatory, investigative and disciplinary purposes (including disclosure of such information in connection with legal process or litigation), management of the employee hotline in accordance with Palo Alto Networks' Code of Conduct, and other ethics and compliance reporting tools.
- For your picture, use with your contact details in Palo Alto Networks directories, in internal communications and newsletters, and in external news and media in connection with events and updates about Palo Alto Networks.

Where permitted by and in accordance with local law, we may also have background checks performed to evaluate eligibility for employment, and collect medical information, if a regular or onboarding health check is required or to evaluate eligibility for applicable benefits.

Personal data will be transferred to Palo Alto Networks Inc., its affiliates and contractors, in the US and other countries, including outside the EEA, and will be stored and processed manually and electronically through global systems and tools for the purposes above. Information contained in internal directories may be accessed on a worldwide basis. Other personal data will primarily be processed by your direct manager, and by employees of the HR, IT and finance, legal and facilities departments, where relevant and necessary. Palo Alto Networks relies on data transfer agreements based on the EU model clauses for the transfer of EU employee data to the US. Personal data may be shared with government authorities and/or law enforcement officials if required for the purposes above, if mandated by law, or if required for the legal protection of Palo Alto Networks' legitimate interests in compliance with applicable laws. Personal data may also be shared with third party service providers, who will process it on behalf of Palo Alto Networks for the purposes above. Such third parties include, but are not limited to, payroll service providers, IT service providers, travel agencies and travel service providers, banks, credit card companies, brokers, medical services and medical insurance providers, training providers, survey service providers, investigators, employee hotline administrators, data custodians, etc.

Palo Alto Networks has taken appropriate technical, administrative, physical and procedural security measures, consistent with local and international information practices, to protect the personal data from misuse, unauthorized access or disclosure, loss, alteration, or destruction. These measures include:

Physical safeguards, such as locked doors and file cabinets, controlled access to our facilities, and secure destruction of media containing personal data.

Technology safeguards, such as use of anti-virus and endpoint protection software, encryption, and monitoring of our systems and data centers to ensure compliance with our security policies.

Organizational safeguards, through training and awareness programs on security and privacy, to ensure employees understand the importance and means by which they must protect personal data, as well as through privacy policies and policy standards that govern how Palo Alto Networks treats personal data.

According to the law, you have the right to access, rectify, block, complete and, where applicable, delete personal data that relates to you, to object to the processing of such data and to request an explanation about the processing by contacting HR Connect or your HR representative at any time. There are exceptions to these rights so that access may be denied, for example, if making the information available would reveal personal information about another person or if Palo Alto Networks is legally prevented from disclosing such information. You may also be able to seek a remedy through the Data Protection Authorities or the courts if you believe that your rights have been breached.

Where we require personal data to comply with legal or contractual obligations, then provision of such data is mandatory: if such data is not provided, then we will not be able to manage the employment relationship, or to meet obligations placed on us. In all other cases, provision of requested personal data is optional.

.....

I have read the Privacy Notice above and, where this is necessary for Palo Alto Networks to be able to process my data because the processing cannot be justified in other ways, I consent to the collection and processing of my personal data for purposes as described above.

Name:
Nir Zuk
Address:

Signature:
/s/ Nir Zuk

**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 19, 2020

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

I, Luis Felipe Visoso, 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/ LUIS FELIPE VISOSO

Luis Felipe Visoso
Chief Financial Officer

Date: November 19, 2020

**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, 2020, 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 19, 2020

**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, Luis Felipe Visoso, 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, 2020, 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/ LUIS FELIPE VISOSO

Luis Felipe Visoso

Chief Financial Officer

Date: November 19, 2020