

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 March 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: 001-37461



ALARM.COM HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

8281 Greensboro Drive Suite 100 Tysons Virginia

(Address of principal executive offices)

26-4247032

(I.R.S. Employer
Identification Number)

22102

(Zip Code)

Tel: (877) 389-4033

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	ALRM	The Nasdaq Stock Market LLC

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

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

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

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-Accelerated Filer	☐	Smaller Reporting Company	☐
		Emerging Growth Company	☐

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

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

As of April 28, 2020, there were 48,740,865 outstanding shares of the registrant's common stock, par value \$0.01 per share.

ALARM.COM HOLDINGS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE FISCAL QUARTER ENDED MARCH 31, 2020

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PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS (unaudited)

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended March 31,	
	2020	2019
Revenue:		
SaaS and license revenue	\$ 91,950	\$ 80,055
Hardware and other revenue	59,989	32,280
Total revenue	151,939	112,335
Cost of revenue⁽¹⁾:		
Cost of SaaS and license revenue	12,328	12,325
Cost of hardware and other revenue	45,652	26,625
Total cost of revenue	57,980	38,950
Operating expenses:		
Sales and marketing	17,075	13,228
General and administrative	20,865	19,212
Research and development	39,730	26,496
Amortization and depreciation	6,422	5,228
Total operating expenses	84,092	64,164
Operating income	9,867	9,221
Interest expense	(645)	(821)
Interest income	459	808
Other income, net	92	44
Income before income taxes	9,773	9,252
Provision for income taxes	1,202	242
Net income	8,571	9,010
Net loss attributable to redeemable noncontrolling interest	236	—
Net income attributable to common stockholders	\$ 8,807	\$ 9,010
Per share information attributable to common stockholders:		
Net income per share:		
Basic	\$ 0.18	\$ 0.19
Diluted	\$ 0.18	\$ 0.18
Weighted average common shares outstanding:		
Basic	48,725,565	48,172,243
Diluted	50,246,987	50,172,818

(1) Exclusive of amortization and depreciation shown in operating expenses below.

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	March 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 171,732	\$ 119,629
Accounts receivable, net of allowance for credit losses of \$4,789 and \$2,584, respectively, and net of allowance for product returns of \$1,224 and \$1,075, respectively	81,894	76,373
Inventory, net	36,841	34,168
Other current assets, net of allowance for credit losses of \$39 and \$16, respectively	18,834	13,504
Total current assets	309,301	243,674
Property and equipment, net	39,467	38,548
Intangible assets, net	99,420	103,438
Goodwill	104,963	104,963
Deferred tax assets	17,964	19,137
Operating lease right-of-use assets	34,939	30,523
Other assets, net of allowance for credit losses of \$77 and \$0, respectively	18,021	17,516
Total assets	\$ 624,075	\$ 557,799
Liabilities, redeemable noncontrolling interest and stockholders' equity		
Current liabilities:		
Accounts payable, accrued expenses and other current liabilities	\$ 53,089	\$ 48,727
Accrued compensation	11,739	16,342
Deferred revenue	4,028	3,043
Operating lease liabilities	8,803	7,683
Total current liabilities	77,659	75,795
Deferred revenue	8,074	7,455
Long-term debt	113,000	63,000
Operating lease liabilities	40,264	37,199
Other liabilities	7,888	7,489
Total liabilities	246,885	190,938
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interest	10,974	11,210
Stockholders' equity		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized; no shares issued and outstanding as of March 31, 2020 and December 31, 2019.	—	—
Common stock, \$0.01 par value, 300,000,000 shares authorized; 48,807,707 and 48,700,963 shares issued; and 48,660,454 and 48,700,713 shares outstanding as of March 31, 2020 and December 31, 2019, respectively.	488	487
Additional paid-in capital	373,349	365,627
Treasury stock, at cost; 147,153 and 0 shares as of March 31, 2020 and December 31, 2019, respectively.	(5,149)	—
Accumulated deficit	(2,472)	(10,463)
Total stockholders' equity	366,216	355,651
Total liabilities, redeemable noncontrolling interest and stockholders' equity	\$ 624,075	\$ 557,799

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2020	2019
Cash flows from / (used in) operating activities:		
Net income	\$ 8,571	\$ 9,010
Adjustments to reconcile net income to net cash from / (used in) operating activities:		
Provision for credit losses on accounts receivable	1,885	260
Reserve for product returns	291	(120)
Provision for credit losses on notes receivable	(349)	—
Amortization on patents and tooling	199	167
Amortization and depreciation	6,422	5,228
Amortization of debt issuance costs	27	27
Amortization of operating leases	2,045	1,803
Deferred income taxes	1,327	135
Change in fair value of contingent liability	(568)	—
Stock-based compensation	6,358	4,266
Acquired in-process research and development	3,297	—
Changes in operating assets and liabilities:		
Accounts receivable	(8,064)	(6,753)
Inventory	(2,673)	(2,724)
Other current and non-current assets	(6,108)	(909)
Accounts payable, accrued expenses and other current liabilities	83	(9,987)
Deferred revenue	1,604	360
Operating lease liabilities	(2,259)	(1,908)
Other liabilities	812	(42)
Cash flows from / (used in) operating activities	<u>12,900</u>	<u>(1,187)</u>
Cash flows used in investing activities:		
Additions to property and equipment	(3,719)	(2,962)
Purchases of in-process research and development	(3,297)	—
Issuances or purchases of notes receivable	—	(20,061)
Receipt of payment on notes receivable	3	—
Cash flows used in investing activities	<u>(7,013)</u>	<u>(23,023)</u>
Cash flows from financing activities:		
Proceeds from credit facility	50,000	—
Repayments of credit facility	—	(1,000)
Purchases of treasury stock	(5,149)	—
Issuances of common stock from equity-based plans	1,365	1,591
Cash flows from financing activities	<u>46,216</u>	<u>591</u>
Net increase / (decrease) in cash and cash equivalents	<u>52,103</u>	<u>(23,619)</u>
Cash and cash equivalents at beginning of the period	<u>119,629</u>	<u>146,061</u>
Cash and cash equivalents at end of the period	<u><u>\$ 171,732</u></u>	<u><u>\$ 122,442</u></u>

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Condensed Consolidated Statements of Equity
(in thousands)
(unaudited)

	Redeemable Noncontrolling Interest	Preferred Stock		Common Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Deficit	Total Stockholders' Equity
		Shares	Amount	Shares	Amount		Shares	Amount		
Balance as of December 31, 2019	\$ 11,210	—	\$ —	48,701	\$ 487	\$ 365,627	—	\$ —	\$ (10,463)	\$ 355,651
Adoption of accounting standard on credit losses	—	—	—	—	—	—	—	—	(816)	(816)
Common stock issued in connection with equity-based plans	—	—	—	107	1	1,364	—	—	—	1,365
Purchases of treasury stock	—	—	—	—	—	—	147	(5,149)	—	(5,149)
Stock-based compensation expense	—	—	—	—	—	6,358	—	—	—	6,358
Net income / (loss) attributable to common stockholders	(236)	—	—	—	—	—	—	—	8,807	8,807
Balance as of March 31, 2020	\$ 10,974	—	\$ —	48,808	\$ 488	\$ 373,349	147	\$ (5,149)	\$ (2,472)	\$ 366,216

	Redeemable Noncontrolling Interest	Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
		Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	\$ —	—	\$ —	48,103	\$ 481	\$ 341,139	\$ (64,031)	\$ 277,589
Adoption of accounting standard on leases	—	—	—	—	—	—	37	37
Common stock issued in connection with equity-based plans	—	—	—	147	1	1,590	—	1,591
Vesting of common stock subject to repurchase	—	—	—	—	—	2	—	2
Stock-based compensation expense	—	—	—	—	—	4,267	—	4,267
Net income / (loss) attributable to common stockholders	—	—	—	—	—	—	9,010	9,010
Balance as of March 31, 2019	\$ —	—	\$ —	48,250	\$ 482	\$ 346,998	\$ (54,984)	\$ 292,496

See accompanying notes to the condensed consolidated financial statements.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements
March 31, 2020 and 2019
(unaudited)

Note 1. Organization

Alarm.com Holdings, Inc. (referred to herein as Alarm.com, the Company, or we) is the leading platform for the intelligently connected property. We offer a comprehensive suite of cloud-based solutions for the smart residential and commercial property, including interactive security, video monitoring, intelligent automation and energy management. Millions of property owners depend on our technology to intelligently secure, automate and manage their residential and commercial properties. Our solutions are delivered through an established network of over 9,000 trusted service provider partners, who are experts at selling, installing and supporting our solutions. We derive revenue from the sale of our cloud-based Software-as-a-Service, or SaaS, services, license fees, software, hardware, activation fees and other revenue. Our fiscal year ends on December 31.

Note 2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include our accounts and those of our majority-owned and controlled subsidiaries after elimination of intercompany accounts and transactions.

These unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP, for interim financial information and the applicable rules and regulations of the Securities and Exchange Commission, or SEC. Accordingly, they do not include all the information and footnotes required by GAAP for annual financial statements. They should be read together with our audited consolidated financial statements and related notes thereto for the year ended December 31, 2019 included in our Annual Report on Form 10-K filed with the SEC on February 26, 2020, or the Annual Report. The condensed consolidated balance sheet as of December 31, 2019 was derived from our audited financial statements, but does not include all disclosures required by GAAP for annual financial statements.

In the opinion of management, these condensed consolidated financial statements include all normal recurring adjustments necessary for a fair statement of the results of operations, financial position and cash flows. Since December 2019, a novel strain of coronavirus, SARS-CoV-2, causing a disease referred to as COVID-19, has spread globally, including to the United States. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The COVID-19 pandemic has been disrupting and will continue to disrupt our supply chain and sales channels for an unknown period of time due to the impact of COVID-19 on manufacturing, production and global transportation, as well as to our sales channels due to restrictions on our service providers' ability to meet with residential and commercial property owners who use our solutions. In addition, the COVID-19 pandemic has resulted in a global slowdown of economic activity that has and for an unknown period of time will likely continue to decrease demand for a broad variety of goods and services. The results of operations for the three months ended March 31, 2020 are not necessarily indicative of the results that can be expected for our entire fiscal year ending December 31, 2020, which is increasingly true in periods of extreme uncertainty, such as the uncertainty caused by the COVID-19 pandemic.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. As of the date of issuance of these financial statements, we are not aware of any specific event or circumstance that would require us to update our estimates, assumptions and judgments or revise the carrying value of our assets or liabilities. However, our estimates, judgments and assumptions are continually evaluated based on available information and experience and may change as new events occur and additional information is obtained. Because of the use of estimates inherent in the financial reporting process and given the additional or unforeseen effects from the COVID-19 pandemic, actual results could differ from those estimates and any such differences may be material. Estimates are used when accounting for revenue recognition, allowances for credit losses, allowance for hardware returns, estimates of obsolete inventory, long-term incentive compensation, stock-based compensation, income taxes, legal reserves, contingent consideration and goodwill and intangible assets.

Reclassifications

Certain previously reported amounts in the condensed consolidated statements of operations for the three months ended March 31, 2019 have been reclassified to conform to our current presentation to reflect interest income as a separate line item, which was previously included in other income, net. Certain previously reported amounts in the condensed consolidated statements of cash flows for the three months ended March 31, 2019 have been reclassified to conform to our current presentation, including the addition of an operating lease liabilities separate line item, which was previously included in other liabilities and accounts payable, accrued expenses and other current liabilities.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
March 31, 2020 and 2019

Comprehensive Income

Our comprehensive income for the three months ended March 31, 2020 and 2019 was equal to our net income disclosed in the condensed consolidated statements of operations.

Significant Accounting Policies

Other than those disclosed herein, there have been no other material changes to our significant accounting policies during the three months ended March 31, 2020 from those disclosed in our Annual Report.

Treasury Stock

We account for treasury stock under the cost method and present treasury stock, including any applicable commissions and fees, as a component of stockholders' equity in the condensed consolidated balance sheets and statements of equity. Treasury stock held by us may be retired or reissued in the future.

Credit Losses

The allowance for credit losses is a valuation account that is deducted from the accounts receivable and notes receivable amortized cost basis to present the net amount expected to be collected. We estimate the allowance balance by applying the loss-rate method using relevant available information from internal and external sources, including historical write-off activity, current conditions and reasonable and supportable forecasts. Historical credit loss experience provides the basis for the estimation of expected credit losses. Adjustments to historical loss information are made for changes in economic conditions, such as changes in unemployment rates. We use projected economic conditions over a period no more than twelve months based on data from external sources. For periods beyond the twelve-month reasonable and supportable forecast period, we revert to historical loss information immediately.

The allowance for credit losses is measured on a pooled basis when similar risk characteristics exist. When assessing whether to measure certain financial assets on a pooled basis, we considered various risk characteristics, including the financial asset type, size and the historical or expected credit loss pattern. These risk characteristics are relevant to accounts receivable and notes receivable. We identified the following two portfolio segments for our accounts receivable: (i) outstanding accounts receivable balances within Alarm.com and certain subsidiaries and (ii) outstanding accounts receivable balances within all other subsidiaries. We identified the following two portfolio segments for our notes receivable: (i) loan receivables and (ii) hardware financing receivables. There were no changes to our portfolio segments since the adoption of Accounting Standards Update, or ASU, 2016-13, "Financial Instruments - Credit Losses (Topic 326)," or Topic 326, and no changes to our policies or practices involving the issuance of notes receivable, customer acquisitions or any other factors that influenced our estimate of expected credit losses. Additionally, there were no significant changes in the amount of write-offs during the three months ended March 31, 2020 as compared to historical periods. There were no purchases or sales of financial assets during the three months ended March 31, 2020 and 2019.

Expected credit losses are estimated over the contractual term of the financial assets and we adjust the term for expected prepayments when appropriate. For the three months ended March 31, 2020, credit loss expense of \$1.4 million was recorded in general and administrative expense in our condensed consolidated statements of operations. The contractual term excludes expected extensions, renewals and modifications because extension and renewal options are unconditionally cancelable by us. Write-offs of the amortized cost basis are recorded to the allowance for credit losses. Any subsequent recoveries of previously written off balances are recorded as a reduction to credit loss expense.

We do not accrue interest on notes receivable that are considered impaired or are 90 days or greater past due based on their contractual payment terms. Notes receivable that are 90 days or greater past due are placed on nonaccrual status. Notes receivable may be placed on nonaccrual status earlier if, in management's opinion, a timely collection of the full principal and interest becomes uncertain. After a note receivable has been placed on nonaccrual status, interest will be recognized when cash is received. A note receivable may be returned to accrual status after all of the customer's delinquent balances of principal and interest have been settled, and collection of all remaining contractual amounts due is reasonably assured. We have elected not to measure an allowance for credit losses for accrued interest receivables. We write-off any accrued interest on notes receivable that are considered impaired or are 90 days or greater past due based on their contractual payment terms by reversing interest income. The accrued interest receivable as of March 31, 2020 and December 31, 2019 was less than \$0.1 million and is reflected in other current assets within our condensed consolidated balance sheets and excluded from the amortized cost basis of the notes receivable. We did not write-off any accrued interest receivable during the three months ended March 31, 2020 and 2019.

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
March 31, 2020 and 2019

Recent Accounting Pronouncements

Adopted

On June 16, 2016, the Financial Accounting Standards Board, or FASB, issued Topic 326 which provides guidance designed to provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. From November 2018 to February 2020, amendments to Topic 326 were issued to clarify numerous accounting topics. When determining such expected credit losses, the guidance requires companies to apply a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The amendment was effective for us beginning on January 1, 2020.

On January 1, 2020, we adopted Topic 326 by applying the modified retrospective approach to our trade receivables and our notes receivable that were outstanding as of that date, which required us to record the initial effect of Topic 326 as a cumulative-effect adjustment to retained earnings on January 1, 2020.

The adoption of Topic 326 resulted in the recording of the following amounts on our condensed consolidated balance sheets (in thousands):

Balance Sheet Caption	As of January 1, 2020
Accumulated deficit	\$ 816
Accounts receivable, net	(367)
Other current assets	(83)
Other assets	(366)

The adoption of Topic 326 did not materially impact our condensed consolidated statements of operations, condensed consolidated statement of equity or our condensed consolidated statements of cash flows.

On August 28, 2018, the FASB issued ASU 2018-13, "*Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*," which provides guidance designed to improve the effectiveness of fair value measurement disclosures in notes to the financial statements. The update removes several existing disclosure requirements, including, but not limited to: (i) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, (ii) the policy for timing of transfers between levels and (iii) the valuation processes for Level 3 fair value measurements. The update also adds additional disclosure requirements for public companies, including but not limited to: (i) the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and (ii) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The update also modifies and clarifies several existing disclosure requirements. The amendment in this update was effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. On January 1, 2020, we adopted Topic 820 and updated our fair value measurement disclosures (see Note 9). This pronouncement did not have a material impact on our condensed consolidated financial statements or disclosures.

On January 16, 2020, the FASB issued ASU 2020-1, "*Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815): Clarifying the Interactions between Topic 321, Topic 323, and Topic 815*," which provides guidance on the interaction between accounting standards related to equity securities, equity method investments and certain derivatives. This amendment clarifies that an entity should consider observable transactions that require it to either apply or discontinue the equity method of accounting for the purposes of applying the measurement alternative immediately before applying, or upon discontinuing, the equity method. The amendment also clarifies that an entity should not consider whether, upon the settlement of the forward contract or exercise of the purchased option, individually or with existing investments, the underlying securities would be accounted for under the equity method or the fair value option in accordance with the financial instruments guidance. The amendment in this update is effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted. On January 1, 2020, we adopted this amendment on a prospective basis and the adoption did not have a material impact on our consolidated financial statements.

Not Yet Adopted

On December 18, 2019, the FASB issued ASU 2019-12, "*Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*," which simplifies the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The update also simplifies GAAP for other areas of Topic 740 by clarifying and amending existing guidance to improve consistent

ALARM.COM HOLDINGS, INC.
Notes to the Condensed Consolidated Financial Statements (Unaudited) — (Continued)
March 31, 2020 and 2019

application. The amendment in this update is effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted. We are currently assessing the impact this pronouncement may have on our consolidated financial statements.

On March 12, 2020, the FASB issued ASU 2020-04, *"Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting,"* which provides optional guidance to ease the potential accounting burden associated with transitioning away from reference rates that are expected to be discontinued such as the Eurodollar Base Rate, or LIBOR. The update allows entities to elect not to apply certain modification accounting requirements to contracts affected by the discontinuation of a reference rate if certain criteria are met. The amendment was effective beginning March 12, 2020 and will continue to be effective through December 31, 2022. We are currently assessing the impact this pronouncement may have on our consolidated financial statements.

Note 3. Revenue from Contracts with Customers

Revenue Recognition

We derive our revenue from three primary sources: the sale of cloud-based SaaS services on our integrated Alarm.com platform, the sale of licenses and services on our non-hosted software platform, or Software platform, and the sale of hardware products. We sell our platform and hardware solutions to service provider partners that resell our solutions and hardware to residential and commercial property owners, who are the service provider partners' customers. Our subscribers consist of all of the properties maintained by those residential and commercial property owners to which we are delivering at least one of our solutions. We also sell our hardware to distributors who resell the hardware to service provider partners. We enter into contracts with our service provider partners that establish pricing for access to our platform solutions and for the sale of hardware. These service provider contracts typically have an initial term of one year, with subsequent renewal terms of one year. Our service provider partners typically enter into contracts with our subscribers, which our service provider partners have indicated range from three to five years in length.

When determining the amount of consideration we expect to be entitled to for the sale of our hardware, we estimate the variable consideration associated with customer returns. We record a reserve against revenue for hardware returns based on historical returns. For the twelve months ended March 31, 2020 and 2019, our reserve against revenue for hardware returns was 1%. We evaluate our hardware reserve on a quarterly basis or if there is an indication of significant changes in return experience. Historically, our returns of hardware have not significantly differed from our estimated reserve. Additionally, we provide warranties related to the intended functionality of the products and services provided and those warranties typically allow for the return of hardware up to one year past the date of sale. We determined these warranties are not separate performance obligations as they cannot be purchased separately and do not provide a service in addition to an assurance the hardware will function as expected.

Our hardware and other revenue also includes our revenue from the sale of perpetual licenses that provide our customers in the commercial market the right to use our OpenEye video surveillance software for an indefinite period of time in exchange for a one-time license fee, which is generally paid at contract inception. Our perpetual licenses provide a right to use intellectual property that is functional in nature and has significant stand-alone functionality. Accordingly, for perpetual licenses of functional intellectual property, revenue is recognized at the point-in-time when control has been transferred to the customer, which occurs once the software has been made available to the customer.

Hardware and other revenue may also include activation fees charged to some of our service provider partners for activation of a new subscriber account on our platforms, as well as fees paid by service provider partners for our marketing services. Our service provider partners use services on our platforms, such as support tools and applications, to assist in the installation of our solutions in subscriber properties. This installation marks the beginning of the service period on our platforms and, on occasion, we earn activation revenue for fees charged for this service. The activation fee is non-refundable, separately negotiated and specified in our contractual arrangements with our service provider partners and is charged to the service provider partner for each subscriber activated on our platforms. The decision whether to charge an activation fee is based in part on the expected number of subscribers to be added by our service provider partners and as a result, many of our largest service provider partners do not pay an activation fee. Activation fees are not offered on a stand-alone basis separate from our SaaS offering and are billed and received at the beginning of the arrangement. We record activation fees initially as deferred revenue and we recognize these fees ratably over the expected term of the subscribers' account which we estimate is ten years based on our annual attrition rate. The portion of these activation fees included in current and long-term deferred revenue as of our balance sheet date represents the amounts that will be recognized ratably as revenue over the following twelve months, or longer as appropriate, until the ten-year expected term is complete. The balance of deferred revenue for activation fees was \$7.8 million and \$8.1 million as of March 31, 2020 and December 31, 2019, respectively, which combines current and long-term balances.

SaaS and license revenue associated with our contracts is invoiced and revenue is recognized at an amount that corresponds directly with the value of the performance completed to date. Additionally, the consideration received from hardware sales corresponds directly with the stand-alone selling price of the hardware. As a result, we have elected to use the practical

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expedient related to the amount of transaction price allocated to the unsatisfied performance obligations and therefore, we have not disclosed the total remaining revenue expected to be recognized on all contracts or the expected period over which the remaining revenue would be recognized.

Contract Assets

At contract inception, we assess the goods and services promised in our contracts with customers and identify a performance obligation for each distinct promise to transfer a good or service, or bundle of goods or services. To identify the performance obligations, we consider all of the goods or services promised in the contract, whether explicitly stated or implied based on customary business practices. We record a contract asset when we satisfy a performance obligation by transferring a promised good or service. Contract assets can be conditional or unconditional depending on whether another performance obligation must be satisfied before payment can be received. We receive payments from our service provider partners based on the billing schedule established in our contracts. All of the accounts receivable presented in the balance sheet represent unconditional rights to consideration. We do not have any assets from contracts containing conditional rights and we do not have any assets from satisfied performance obligations that have not been invoiced.

We recognize an asset related to the costs incurred to obtain a contract only if we expect to recover those costs and we would not have incurred those costs if the contract had not been obtained. We recognize an asset from the costs incurred to fulfill a contract if the costs (i) are specifically identifiable to a contract, (ii) enhance resources that will be used in satisfying performance obligations in future and (iii) are expected to be recovered. Our contract assets consist of capitalized commission costs and upfront payments made to a customer. Based on the policy above, we capitalize a portion of our commission costs as an incremental cost of obtaining a contract. When calculating the incremental cost of obtaining a contract, we exclude any commission costs related to metrics that could be satisfied without obtaining a contract, including training-related metrics. We amortize our commission costs over a period of three years, which is consistent with the period over which the products and services related to the commission are transferred to the customer. The three-year period was determined based on our review of historical enhancements and upgrades to our products and services. We applied the portfolio approach to account for the amortization of contract costs as each contract has similar characteristics. Upfront payments made to a customer are capitalized and amortized over the expected period of benefit and are recorded as a reduction to revenue.

The current portion of capitalized commission costs and upfront payments made to customers are included in other current assets within our condensed consolidated balance sheets. The non-current portion of capitalized commission costs and upfront payments made to customers are reflected in other assets within our condensed consolidated balance sheets. Our amortization of contract assets during the three months ended March 31, 2020 was \$0.8 million, as compared to \$0.5 million during the same period in the prior year.

We review the capitalized costs for impairment at least annually. Impairment exists if the carrying amount of the asset recognized from contract costs exceeds the remaining amount of consideration we expect to receive in exchange for providing the goods and services to which such asset relates, less the costs that relate directly to providing those good and services and that have not been recognized as an expense. We did not record an impairment loss on our contract assets during the three months ended March 31, 2020 and 2019.

The changes in our contract assets are as follows (in thousands):

	Three Months Ended March 31,	
	2020	2019
Beginning of period balance	\$ 4,578	\$ 2,881
Commission costs and upfront payments to a customer capitalized in period	1,165	716
Amortization of contract assets	(811)	(514)
End of period balance	<u>\$ 4,932</u>	<u>\$ 3,083</u>

Contract Liabilities

Contract liabilities include payments received in advance of performance under the contract, and are realized with the associated revenue recognized under the contract. All of the deferred revenue presented in the condensed consolidated balance sheets represents contract liabilities resulting from advance cash receipts from customers or amounts billed in advance to customers from the sale of services. Changes in deferred revenue are due to our performance under the contract as well as to cash received from new contracts for which services have not been provided.

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The changes in our contract liabilities are as follows (in thousands):

	Three Months Ended March 31,	
	2020	2019
Beginning of period balance	\$ 10,498	\$ 11,176
Revenue deferred in period	3,520	1,555
Revenue recognized from amounts included in contract liabilities	(1,916)	(1,195)
End of period balance	<u>\$ 12,102</u>	<u>\$ 11,536</u>

The revenue recognized from amounts included in contract liabilities primarily relates to prepayment contracts with customers as well as payments of activation fees.

Note 4. Accounts Receivable, Net

The components of accounts receivable, net are as follows (in thousands):

	March 31, 2020	December 31, 2019
Accounts receivable	\$ 87,907	\$ 80,032
Allowance for credit losses	(4,789)	(2,584)
Allowance for product returns	(1,224)	(1,075)
Accounts receivable, net	<u>\$ 81,894</u>	<u>\$ 76,373</u>

For the three months ended March 31, 2020, we recorded a provision for credit losses of \$1.9 million on our accounts receivable, as compared to \$0.3 million for the same period in the prior year.

For the three months ended March 31, 2020, we recorded a reserve for product returns of \$0.3 million, as compared to a reduction to the reserve for product returns of \$0.1 million recorded for the same period in the prior year. Historically, we have not experienced write-offs for uncollectible accounts or sales returns that have differed significantly from our estimates.

Allowance for Credit Losses - Accounts Receivable

The changes in our allowance for credit losses for accounts receivable are as follows (in thousands):

	Three Months Ended March 31, 2020	
	Alarm.com and Certain Subsidiaries	All Other Subsidiaries
Beginning of period balance, prior to adoption of Topic 326	\$ (2,500)	\$ (84)
Impact of adopting Topic 326	(212)	(155)
Provision for expected credit losses	(1,886)	1
Write-offs	43	4
End of period balance, subsequent to adoption of Topic 326	<u>\$ (4,555)</u>	<u>\$ (234)</u>

Note 5. Inventory, Net

The components of inventory, net are as follows (in thousands):

	March 31, 2020	December 31, 2019
Raw materials	\$ 9,101	\$ 8,921
Finished goods	27,740	25,247
Total inventory, net	<u>\$ 36,841</u>	<u>\$ 34,168</u>

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Note 6. Acquisitions

Acquisition of a Business - OpenEye

On October 21, 2019, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired 85% of the issued and outstanding capital stock of PC Open Incorporated, a Washington corporation, doing business as OpenEye. OpenEye provides cloud-managed video surveillance solutions for the enterprise commercial market. We believe the acquisition of OpenEye will provide a key element to our comprehensive suite of interactive cloud-based services spanning video, access control, intrusion and automation for domestic and international commercial enterprises.

In consideration for the purchase of 85% of the issued and outstanding capital stock of OpenEye, we paid \$61.2 million in cash on October 21, 2019, after deducting \$2.8 million related to an agreed holdback. Pursuant to the terms of the stock purchase agreement, following the preliminary determination of the working capital of OpenEye as of the closing date, the purchase price increased by \$0.2 million. The working capital adjustment is expected to be finalized and paid to the stockholders of OpenEye in the second quarter of 2020 along with a portion of the holdback. The remaining amount of the holdback is expected to be paid to the stockholders of OpenEye by the fourth quarter of 2022, subject to offset for any indemnification obligations. An earn-out of up to an additional \$11.0 million is payable if certain calendar 2020 revenue targets are met, of which contingent consideration of \$2.8 million was recorded at October 21, 2019. The purchase price allocation, which is pending the final determination of the working capital and tax adjustments, was not finalized as of the filing date of this Quarterly Report on Form 10-Q.

The table below sets forth the purchase consideration and the preliminary allocation to estimate the fair value of the tangible and intangible net assets acquired (in thousands):

	October 21, 2019
<i>Calculation of Purchase Consideration:</i>	
Cash paid, net of working capital adjustment	\$ 61,403
Holdback consideration	2,820
Contingent consideration	2,793
Total consideration	<u>\$ 67,016</u>
<i>Estimated Tangible and Intangible Net Assets:</i>	
Cash	\$ 2,352
Accounts receivable	5,742
Inventory	4,687
Other current assets	216
Property and equipment	296
Customer relationships	19,805
Developed technology	16,583
Trade name	2,219
Accounts payable	(2,746)
Accrued expenses	(1,017)
Other current liabilities	(1,683)
Deferred tax liability	(8,510)
Deferred revenue	(889)
Redeemable noncontrolling interest	(11,411)
Goodwill	41,372
Total estimated tangible and intangible net assets	<u>\$ 67,016</u>

Goodwill of \$41.4 million reflects the value of acquired workforce and synergies we expect to achieve from integrating OpenEye's cloud-managed video surveillance solutions into our existing comprehensive suite of interactive cloud-based services for domestic and international commercial enterprises. None of the goodwill recognized is expected to be deductible for income tax purposes in future periods. We allocate goodwill to reporting units based on expected benefit from synergies and have preliminarily allocated the goodwill to the Alarm.com segment.

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Fair Value of Net Assets Acquired and Intangibles

In accordance with ASC 805, OpenEye constituted a business and the assets and liabilities were recorded at their respective fair values as of October 21, 2019. We developed our estimate of the fair value of intangible net assets using a multi-period excess earnings method for customer relationships, the relief from royalty method for the developed technology and the relief-from-royalty method for the trade name.

Customer Relationships

We recorded the customer relationships intangible separately from goodwill based on determination of the length, strength and contractual nature of the relationship that OpenEye shared with its customers. We valued the single group of customer relationships using the multi-period excess earnings method, an income approach. The significant assumptions used in the income approach include estimates about future expected cash flows from customer contracts, the attrition rate and the discount rate. We are amortizing the customer relationships, valued at \$19.8 million, on an attribution basis derived from the discounted cash flows of the model over an estimated useful life of 13 years.

Developed Technology

Developed technology primarily consists of intellectual property of proprietary software that is marketed for sale. We valued the developed technology by applying the relief from royalty method, an income approach. The significant assumptions used in the relief from royalty method include estimates about future expected cash flows from the developed technology, the royalty rate, the obsolescence factor and the discount rate. We are amortizing the OpenEye developed technology, valued at \$16.6 million, on an attribution method based on the discounted cash flows of the model over an estimated useful life of nine years.

Trade Name

We valued the trade names acquired using a relief from royalty method. The significant assumptions used in the income approach include future expected cash flows from the trade name, the royalty rate and the discount rate. We are amortizing the trade names, valued at \$2.2 million, on an attribution basis derived from the discounted cash flows of the model over an estimated useful life of five years.

Redeemable Noncontrolling Interests

Our redeemable noncontrolling interest relates to our 85% equity ownership interest in OpenEye. The OpenEye stockholder agreement contains a put option that gives the minority OpenEye stockholders the right to sell their remaining 15% equity ownership interest to us based on the fair value of the shares. The OpenEye stockholder agreement also contains a call option that gives us the right to purchase the remaining OpenEye shares from the minority OpenEye stockholders based on the fair value of the shares. The put and call options can each be exercised beginning in the first quarter of 2023. The redeemable noncontrolling interest was recorded at fair value on October 21, 2019, by applying the income approach using unobservable inputs for projected cash flows, including projected financial results and a discount rate, which are considered Level 3 inputs. This redeemable noncontrolling interest is considered temporary equity and we report it between liabilities and stockholders' equity in the condensed consolidated balance sheets. The redemption value of the noncontrolling interest was \$11.4 million as of October 21, 2019, and decreased to \$11.0 million as of March 31, 2020.

Contingent Consideration

We account for the contingent consideration related to the potential earn-out payment using fair value and establish a liability for the future earn-out payment based on an estimation of revenue attributable to perpetual licenses and subscription licenses over the 2020 calendar year. As of October 21, 2019, the fair value of the liability was \$2.8 million. See Note 9 for details on the significant unobservable inputs used in the fair value estimate and post-acquisition accounting.

Asset Acquisitions

On March 12, 2020, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party. Substantially all of the acquired assets consisted of in-process research and development, or IPR&D. We believe the acquisition of the IPR&D will strengthen our smart intercom capability, including building access security and convenience within the multiple dwelling unit market for residents, guests and deliveries.

In consideration for the purchase of the IPR&D, we paid approximately \$1.2 million in cash on March 12, 2020, with the remaining \$0.3 million expected to be paid 18 months following the acquisition date, subject to offset for any indemnification obligations. The \$1.5 million consideration related to IPR&D was expensed at the time of the asset acquisition, as the IPR&D had no alternative future use.

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On March 31, 2020, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party. Substantially all of the acquired assets consisted of IPR&D. We believe the acquisition of the IPR&D will further our commitment to make significant investments in innovative research and development in the intelligently connected property market to broaden our suite of solutions.

In consideration for the purchase of the IPR&D, we paid \$2.1 million in cash on March 31, 2020 and \$0.1 million in December 2019, with the remaining \$0.7 million expected to be paid the later of approximately 12 months following the acquisition date or upon resolution of any pending indemnification claims, subject to offset for any indemnification obligations. The \$2.9 million consideration related to IPR&D was expensed at the time of the asset acquisition, as the IPR&D had no alternative future use.

Note 7. Goodwill and Intangible Assets, Net

The changes in goodwill by reportable segment are outlined below (in thousands):

	Alarm.com	Other	Total
Balance as of January 1, 2020	\$ 104,963	\$ —	\$ 104,963
Goodwill acquired	—	—	—
Balance as of March 31, 2020	<u>\$ 104,963</u>	<u>\$ —</u>	<u>\$ 104,963</u>

Due to the current uncertainty in the financial markets resulting from the global COVID-19 pandemic, we assessed our goodwill for indicators of impairment during the three months ended March 31, 2020. We elected to perform a qualitative assessment as of March 31, 2020 and determined there was no impairment of goodwill during the three months ended March 31, 2020. There was also no impairment of goodwill during the three months ended March 31, 2019.

The following table reflects changes in the net carrying amount of the components of intangible assets (in thousands):

	Customer Relationships	Developed Technology	Trade Name	Total
Balance as of January 1, 2020	\$ 84,396	\$ 16,820	\$ 2,222	\$ 103,438
Amortization	(3,471)	(457)	(90)	(4,018)
Balance as of March 31, 2020	<u>\$ 80,925</u>	<u>\$ 16,363</u>	<u>\$ 2,132</u>	<u>\$ 99,420</u>

We recorded \$4.0 million of amortization related to our intangible assets for the three months ended March 31, 2020, as compared to \$3.5 million for the same period in the prior year. There were no impairments of long-lived intangible assets during the three months ended March 31, 2020 and 2019.

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The following tables reflect the weighted average remaining life and carrying value of finite-lived intangible assets (in thousands, except weighted-average remaining life):

March 31, 2020				
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value	Weighted- Average Remaining Life
Customer relationships	\$ 123,731	\$ (42,806)	\$ 80,925	9.6
Developed technology	30,542	(14,179)	16,363	8.4
Trade name	3,304	(1,172)	2,132	4.5
Other	234	(234)	—	—
Total intangible assets	<u>\$ 157,811</u>	<u>\$ (58,391)</u>	<u>\$ 99,420</u>	

December 31, 2019				
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Value	Weighted- Average Remaining Life
Customer relationships	\$ 123,731	\$ (39,335)	\$ 84,396	9.8
Developed technology	30,542	(13,722)	16,820	8.7
Trade name	3,304	(1,082)	2,222	4.8
Other	234	(234)	—	—
Total intangible assets	<u>\$ 157,811</u>	<u>\$ (54,373)</u>	<u>\$ 103,438</u>	

Note 8. Other Assets

Purchases of Patents and Patent Licenses

From time to time, we enter into agreements to purchase patents or patent licenses. The carrying value, net of amortization, of our purchased patents and patent licenses was \$2.3 million and \$2.4 million as of March 31, 2020 and December 31, 2019, respectively. As of March 31, 2020 and December 31, 2019, \$0.5 million of patent costs were included in other current assets and \$1.8 million and \$1.9 million of patent costs were included in other assets, respectively. We have \$5.9 million of historical cost in purchased patents and patent licenses as of March 31, 2020. We are amortizing the patent costs over the estimated useful lives of the patents, which range from three years to twelve years. Patent cost amortization of \$0.1 million for the three months ended March 31, 2020 and 2019 was included in cost of SaaS and license revenue in our condensed consolidated statements of operations. Patent cost amortization of less than \$0.1 million was included in amortization and depreciation in our condensed consolidated statements of operations for the three months ended March 31, 2020 and 2019. In April 2020, we purchased 30 patents for \$0.9 million, which increased our historical patent costs related to purchased patents and patent licenses to \$6.8 million.

Loan to a Distribution Partner

In September 2016, we entered into dealer and loan agreements with a distribution partner. The dealer agreement enables the distribution partner to resell our SaaS services and hardware to their subscribers. Under the loan agreements, we agreed to loan the distribution partner up to \$4.0 million, collateralized by all assets owned by the distribution partner. The advance period for the loan was amended in August 2017 to begin each year on September 1 and end each year on December 31. Interest on the outstanding principal accrued at a rate per annum equal to the greater of 6.0% or LIBOR, plus 4.0%, as determined on the first date of each annual advance period. The repayment of principal and accrued interest was due in three installments beginning in July and ending in August following the advance period. The maturity date of the loan was August 31, 2019; however, the borrower had the option to extend the term of the loan for two successive terms of one year each.

In May 2018, the loan agreement with our distribution partner was amended to convert the entire \$4.0 million note receivable outstanding into a \$4.0 million term loan. The term loan matures on July 31, 2022 and requires annual principal repayments of \$1.0 million on July 31 of each year, commencing on July 31, 2019. The term loan also requires monthly interest payments, with interest accruing on the outstanding principal balance at a rate per annum equal to 6.0% through June 30, 2018 and a rate per annum equal to the LIBOR rate on the first of any interest period plus 7.0% beginning on July 1, 2018. As of March 31, 2020 and December 31, 2019, \$1.0 million of the note receivable balance was included in other current assets in our condensed consolidated balance sheets. As of March 31, 2020 and December 31, 2019, \$2.0 million of the note receivable balance was included in other assets in our condensed consolidated balance sheets, respectively.

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In April 2017, we entered into a subordinated credit agreement with an affiliated entity of the distribution partner and loaned the affiliated entity \$3.0 million, with a maturity date of November 21, 2022. Interest on the outstanding principal balance accrues at a rate of 8.5% per annum and requires monthly interest payments. The \$3.0 million loan receivable balance was included in other assets as of March 31, 2020 and December 31, 2019.

For the three months ended March 31, 2020 and 2019, we recognized \$0.4 million of revenue from the distribution partners associated with these loans.

Loan to and Investment in a Hardware Supplier

In October 2018, we entered into a subordinate convertible promissory note with one of our hardware suppliers, or the October 2018 Promissory Note, which was subsequently amended. In March 2019, we entered into a separate secured promissory note with the same hardware supplier, which, together with the October 2018 Promissory Note, we refer to as the Promissory Notes. Under the Promissory Notes, we agreed to provide the hardware supplier loans of up to \$7.4 million, collateralized by all assets owned by the supplier.

In March 2019, we also purchased and acquired a secured promissory note, or the Acquired Promissory Note, that matured on March 30, 2019 and was originally executed between our hardware supplier and another third-party secured creditor. The Acquired Promissory Note had an outstanding balance of \$26.6 million as of December 31, 2018, including interest. We paid \$16.4 million to the third-party secured creditor in exchange for all of the rights associated with the Acquired Promissory Note, including a security interest and a right to enforce that interest against all assets owned by the hardware supplier. We also paid an additional \$6.0 million to the third-party secured creditor in September 2019 based on the outcome of certain contingencies measured as of May 4, 2019. The fair value of the Acquired Promissory Note at the date of purchase was \$22.4 million, which represented the initial cash consideration paid in March 2019 and the contingent consideration paid in September 2019.

On June 24, 2019, we received a payment of \$7.4 million from the supplier for the partial satisfaction of amounts due under the Promissory Notes and the Acquired Promissory Note. On July 15, 2019, we received an additional payment of \$25.0 million from the supplier and converted the remaining \$5.6 million outstanding notes receivable balance into 9,520,832 shares of Series B preferred stock in the hardware supplier. We concluded that the \$5.6 million equity investment, which is included in the Alarm.com segment, does not meet the criteria for consolidation and will be accounted for using the measurement alternative. Under the alternative, we measure investments without readily determinable fair values at cost, less impairment, adjusted for observable price changes from orderly transactions for identical or similar investments. As a result of the payments received, we reversed the \$3.3 million reserve related to the October 2018 Promissory Note that was previously recorded during the three months ended December 31, 2018. The reversal of the reserve was recorded as a reduction to general and administrative expense in our condensed consolidated statements of operations during the three months ended June 30, 2019.

As a result of the \$25.0 million payment received and conversion of the \$5.6 million outstanding notes receivable balance into an equity investment on July 15, 2019, we recorded interest of \$1.7 million within interest income and a gain of \$6.9 million within other income, net, in our condensed consolidated statements of operations during the three and nine months ended September 30, 2019, related to the Promissory Notes and the Acquired Promissory Note. As of September 30, 2019, there was no remaining outstanding balance of the Promissory Notes and the Acquired Promissory Note. The total equity investment in the hardware supplier was \$5.6 million as of March 31, 2020 and December 31, 2019.

Allowance for Credit Losses - Notes Receivable

The changes in our allowance for credit losses for notes receivable are as follows (in thousands):

	Three Months Ended March 31, 2020	
	Loan Receivables	Hardware Financing Receivables
Beginning of period balance, prior to adoption of Topic 326	\$ —	\$ (16)
Impact of adopting Topic 326	(434)	(15)
Provision for expected credit losses	347	2
Write-offs	—	—
End of period balance, subsequent to adoption of Topic 326	<u>\$ (87)</u>	<u>\$ (29)</u>

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We manage our notes receivables using delinquency as a key credit quality indicator. Current and delinquent notes receivable by class of financing receivables and by year of origination as of March 31, 2020 are as follows (in thousands):

Loan Receivables:	2020	2019	2018	2017	2016	Prior	Total
Current	\$ —	\$ 37	\$ —	\$ 3,000	\$ 3,000	\$ —	\$ 6,037
30-59 days past due	—	—	—	—	—	—	—
60-89 days past due	—	—	—	—	—	—	—
90-119 days past due	—	—	—	—	—	—	—
120+ days past due	—	—	—	—	—	—	—
Total	\$ —	\$ 37	\$ —	\$ 3,000	\$ 3,000	\$ —	\$ 6,037

Hardware Financing Receivables:

Current	\$ —	\$ —	\$ 139	\$ 17	\$ —	\$ —	\$ 156
30-59 days past due	—	113	12	—	—	—	125
60-89 days past due	—	87	—	—	—	—	87
90-119 days past due	—	—	—	40	—	—	40
120+ days past due	—	—	—	15	—	—	15
Total	\$ —	\$ 200	\$ 151	\$ 72	\$ —	\$ —	\$ 423

The amortized cost of notes receivables placed on nonaccrual status is as follows (in thousands):

	March 31, 2020	December 31, 2019
Loan receivables	\$ —	\$ —
Hardware financing receivables	55	16
Total	\$ 55	\$ 16

During the three months ended March 31, 2020 and 2019, there was no interest income recognized related to notes receivables that were in nonaccrual status.

As of March 31, 2020 and December 31, 2019, there were no notes receivables placed in nonaccrual status for which there was not a related allowance for credit losses that did not return to accrual status due to subsequent collections in April 2020. As of March 31, 2020 and December 31, 2019, there were no notes receivables that were 90 days or greater past due for which we continued to accrue interest income.

Prepaid Expenses

As of March 31, 2020 and December 31, 2019, \$11.6 million and \$6.1 million of prepaid expenses were included in other current assets, respectively. In February 2020, we made a prepayment of \$4.7 million for long lead-time parts related to our inventory.

Note 9. Fair Value Measurements

The following tables present our assets and liabilities measured at fair value on a recurring basis (in thousands):

**Fair Value Measurements on a Recurring Basis as of
March 31, 2020**

Fair value measurements in:	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	\$ 146,479	\$ —	\$ —	\$ 146,479
Total	\$ 146,479	\$ —	\$ —	\$ 146,479
Liabilities:				
Contingent consideration liability from acquisitions	\$ —	\$ —	\$ 2,027	\$ 2,027
Total	\$ —	\$ —	\$ 2,027	\$ 2,027

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**Fair Value Measurements on a Recurring Basis as of
December 31, 2019**

Fair value measurements in:	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	\$ 93,303	\$ —	\$ —	\$ 93,303
Total	\$ 93,303	\$ —	\$ —	\$ 93,303
Liabilities:				
Contingent consideration liability from acquisitions	\$ —	\$ —	\$ 2,595	\$ 2,595
Total	\$ —	\$ —	\$ 2,595	\$ 2,595

The following table summarizes the change in fair value of the Level 3 liabilities for contingent consideration liabilities from acquisitions with significant unobservable inputs (in thousands):

	Three Months Ended March 31,	
	2020	2019
Beginning of period balance	\$ 2,595	\$ —
Changes in fair value included in earnings	(568)	—
End of period balance	\$ 2,027	\$ —

The money market accounts are included in our cash and cash equivalents in our condensed consolidated balance sheets. Our money market assets are valued using quoted prices in active markets.

The contingent consideration liability consists of the potential earn-out payment related to our acquisition of 85% of the issued and outstanding capital stock of OpenEye on October 21, 2019. The earn-out payment is contingent on the satisfaction of certain calendar 2020 revenue targets and has a maximum potential payment of up to \$11.0 million. We account for the contingent consideration using fair value and establish a liability for the future earn-out payment based on an estimation of revenue attributable to perpetual licenses and subscription licenses over the 2020 calendar year. The contingent consideration liability was valued with significant unobservable inputs, including the revenue volatility and the discount rate. As of October 21, 2019, the fair value of the liability was \$2.8 million. At each reporting date until the payment date in 2021, we will remeasure the liability, using the same valuation approach. Changes in the fair value resulting from information that existed subsequent to the acquisition date are recorded in general and administrative expense in our condensed consolidated statements of operations. During the three months ended March 31, 2020, the contingent consideration liability decreased \$0.6 million from December 31, 2019 to \$2.0 million, primarily due to a change to OpenEye's 2020 projected revenue. The significant unobservable inputs used in the valuation as of March 31, 2020 included a revenue volatility of 51% and a discount rate of 6%. Selecting another revenue volatility or discount rate within an acceptable range would not result in a significant change to the fair value of the contingent consideration liability.

The contingent consideration liability is included in other liabilities in our condensed consolidated balance sheet as of December 31, 2019 (see Note 12).

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. There were no transfers in or out of Level 3 during the three months ended March 31, 2020 and 2019. We also monitor the value of the investments for other-than-temporary impairment on a quarterly basis. No other-than-temporary impairments occurred during the three months ended March 31, 2020 and 2019.

Note 10. Leases

We lease office space, data centers and office equipment under non-cancelable operating leases with various expiration dates through 2026. In August 2014, we signed a lease for office space in Tysons, Virginia, where we relocated our headquarters to in February 2016. We have subsequently entered into amendments to this lease to provide us with additional office space. In March 2020, we entered into an amendment to the lease for our corporate headquarters, which provides for additional office space, additional parking spaces and additional tenant improvement allowance. The lease term ends in 2026, includes a five-year renewal option and a cumulative tenant improvement allowance of \$11.8 million, including the tenant improvement allowance within the March 2020 lease amendment.

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Supplemental information related to leases is presented in the table below (in thousands, except weighted-average term and discount rate):

	Three Months Ended March 31,	
	2020	2019
Operating lease cost	\$ 2,045	\$ 1,803
Cash paid for amounts included in the measurement of operating lease liabilities	2,259	1,908
Operating lease right-of-use assets obtained in exchange for new operating lease liabilities	6,022	1,459
	March 31, 2020	December 31, 2019
Weighted-average remaining lease term — operating leases	5.6 years	5.7 years
Weighted-average discount rate — operating leases	3.8%	4.0%

Maturities of lease liabilities are as follows (in thousands):

Year Ended December 31,	Operating Leases⁽¹⁾
Remainder of 2020	\$ 7,796
2021	10,489
2022	9,193
2023	8,436
2024	7,652
2025 and thereafter	10,955
Total lease payments	54,521
Less: imputed interest ⁽²⁾	5,454
Present value of lease liabilities	<u>\$ 49,067</u>

(1) Operating lease payments exclude \$2.8 million of legally binding minimum lease payments for leases executed but not yet commenced and includes \$0.4 million for options to extend lease terms that were reasonably certain of being exercised.

(2) Imputed interest was calculated using the incremental borrowing rate applicable for each lease.

We did not have any finance leases or subleases as of March 31, 2020 or December 31, 2019. Our lease agreements do not contain any material residual value guarantees, restrictive covenants or variable lease payments. Short-term lease costs were immaterial for the three months ended March 31, 2020 and 2019.

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Note 11. Liabilities

The components of accounts payable, accrued expenses and other current liabilities are as follows (in thousands):

	March 31, 2020	December 31, 2019
Accounts payable	\$ 38,992	\$ 32,878
Accrued expenses	8,204	10,092
Other current liabilities	5,893	5,757
Accounts payable, accrued expenses and other current liabilities	<u>\$ 53,089</u>	<u>\$ 48,727</u>

The components of other liabilities are as follows (in thousands):

	March 31, 2020	December 31, 2019
Contingent consideration liability from acquisitions	\$ 2,027	\$ 2,595
Holdback liability from acquisitions	2,517	1,650
Other liabilities	3,344	3,244
Other liabilities	<u>\$ 7,888</u>	<u>\$ 7,489</u>

Note 12. Debt, Commitments and Contingencies

The debt, commitments and contingencies described below would require us, or our subsidiaries, to make payments to third parties under certain circumstances.

Debt

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with Silicon Valley Bank, or SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. The 2017 Facility matures in October 2022 and includes an option to further increase the borrowing capacity to \$175.0 million with the consent of the lenders. Costs incurred in connection with the 2017 Facility were capitalized and are being amortized as interest expense over the term of the 2017 Facility. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. During the three months ended March 31, 2020, we borrowed \$50.0 million under the 2017 Facility as a precautionary measure in order to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic. During the three months ended March 31, 2019, we repaid \$1.0 million of the outstanding balance of the 2017 Facility.

The outstanding principal balance on the 2017 Facility accrues interest at a rate equal to, at our option, either (1) LIBOR, plus an applicable margin based on our consolidated leverage ratio, or (2) the highest of (a) the Wall Street Journal prime rate, (b) the Federal Funds rate plus 0.50%, or (c) LIBOR plus 1.00% plus an applicable margin based on our consolidated leverage ratio. For the three months ended March 31, 2020, we elected for the outstanding principal balance to accrue interest at LIBOR plus 1.50%, LIBOR plus 1.75%, LIBOR plus 2.00%, and LIBOR plus 2.50% when our consolidated leverage ratio is less than 1.00:1.00, greater than or equal to 1.00:1.00 but less than 2.00:1.00, greater than or equal to 2.00:1.00 but less than 3.00:1.00 and greater than or equal to 3.00:1.00, respectively. The 2017 Facility also carries an unused line commitment fee of 0.20%. For the three months ended March 31, 2020, the effective interest rate on the 2017 Facility was 3.79%, as compared to 4.88% for the same period in the prior year.

The carrying value of the 2017 Facility was \$113.0 million and \$63.0 million as of March 31, 2020 and December 31, 2019, respectively. The 2017 Facility includes a variable interest rate that approximates market rates and, as such, we classified the liability as Level 2 within the fair value hierarchy and determined that the carrying amount of the 2017 Facility approximated its fair value as of March 31, 2020 and December 31, 2019. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio not to exceed 3.25:1.00 and a consolidated fixed charge coverage ratio of at least 1.25:1.00. As of March 31, 2020, we were in compliance with all financial and non-financial covenants and there were no events of default.

On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018.

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Commitments and Contingencies

Contingent Consideration

On October 21, 2019, we acquired 85% of the issued and outstanding capital stock of OpenEye. Certain stockholders of OpenEye have the right to receive an earn-out payment of up to an additional \$11.0 million based upon satisfaction of certain calendar 2020 revenue targets. As of October 21, 2019, the fair value of the contingent consideration liability was \$2.8 million. At each reporting date until the payment date in 2021, we will remeasure the liability, using the same valuation approach. Changes in the fair value resulting from information that existed subsequent to the acquisition date are recorded in the condensed consolidated statements of operations. During the three months ended March 31, 2020, the contingent consideration liability decreased \$0.6 million from December 31, 2019 to \$2.0 million, primarily due to a change to OpenEye's 2020 projected revenue. The contingent consideration liability is included in other liabilities in our condensed consolidated balance sheet as of March 31, 2020 and December 31, 2019 (see Note 9).

Indemnification Agreements

We have various agreements that may obligate us to indemnify the other party to the agreement with respect to certain matters. Generally, these indemnification provisions are included in contracts arising in the normal course of business. Although we cannot predict the maximum potential amount of future payments that may become due under these indemnification agreements, we do not believe any potential liability that might arise from such indemnity provisions is probable or material.

Letters of Credit

As of March 31, 2020 and December 31, 2019, we had no outstanding letters of credit under the 2017 Facility.

Legal Proceedings

On June 2, 2015, Vivint, Inc., or Vivint, filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. We answered the complaint on July 23, 2015. Among other things, we asserted defenses based on non-infringement and invalidity of the patents in question. On August 19, 2016, the U.S. District Court, District of Utah stayed the litigation pending inter partes review by the U.S. Patent Trial and Appeal Board, or PTAB, of five of the patents in suit. In March 2017, the PTAB issued final written decisions relating to two patents finding all challenged claims unpatentable. In May 2017, the PTAB issued final written decisions relating to the remaining three patents that found certain claims unpatentable, while certain other claims were not found to be unpatentable. Vivint appealed the decisions to the U.S. Court of Appeals for the Federal Circuit, or the Federal Circuit, and we cross-appealed. In July 2018, the Federal Circuit issued orders affirming the PTAB's March 2017 decisions that invalidated all challenged claims of two patents. The U.S. District Court, District of Utah lifted the stay on the litigation on June 26, 2017, with Vivint proceeding with its case on four of the six patents in its complaint. No trial date has been set. In September 2017, the U.S. Patent and Trademark Office, or PTO, ordered ex parte reexaminations of certain claims of two of the remaining patents in suit, at our request. On October 30, 2018 and November 5, 2018, the PTO issued final office actions in the pending reexaminations rejecting all claims being examined as unpatentable over the prior art. Vivint appealed these rejections to the PTAB on March 29, 2019 and April 4, 2019. On February 28, 2020, the PTAB issued a decision affirming the rejections in one of the reexaminations. On December 20, 2018, the Federal Circuit issued an order regarding the inter partes review of three of the remaining patents in suit that vacated, reversed and remanded the PTAB's ruling with regard to the construction of a term ("communication device identification code") as requested by Alarm.com and affirmed the PTAB's May 2017 rulings invalidating certain of the Vivint patents in all other respects. On July 24, 2019, the PTAB issued further decisions with respect to two of the remaining patents in suit, finding additional claims unpatentable in view of the Federal Circuit's December 20, 2018 decision. One of the claims asserted in the litigation was found unpatentable in the July 14, 2019 decisions. Vivint appealed the July 24, 2019 decisions to the Federal Circuit on September 25, 2019. On April 16, 2020, the U.S. District Court, District of Utah issued an order granting a temporary stay of the litigation, to expire on August 10, 2020, due to the COVID-19 pandemic and based on the stipulation of both parties.

Should Vivint prevail in proving Alarm.com infringes one or more of its patent claims, we could be required to pay damages of Vivint's lost profits and/or a reasonable royalty for sales of our solution. Since all remaining patent claims in the litigation have expired, Vivint shall not be entitled to injunctive relief as a remedy in this matter. While we believe we have valid defenses to Vivint's claims, any of these outcomes could result in a material adverse effect on our business. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

On October 22, 2019, EcoFactor, Inc., or EcoFactor, filed a complaint with the U.S. International Trade Commission, or ITC, naming Alarm.com Incorporated and Alarm.com Holdings, Inc., among others, as proposed respondents. The complaint alleges that Alarm.com's smart thermostats infringe three U.S. patents owned by EcoFactor. EcoFactor is seeking a permanent limited exclusion order and permanent cease and desist order. On November 22, 2019, the ITC instituted an investigation into

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EcoFactor's allegations naming Alarm.com Incorporated, Alarm.com Holdings, Inc. and others as respondents. We answered the complaint on December 19, 2019. Among other things, we asserted defenses based on non-infringement and invalidity of the patents in question. The administrative law judge presiding over the investigation has set March 15, 2021 as the target date for completion of the investigation.

On November 11, 2019, EcoFactor filed a lawsuit against us in U.S. District Court, District of Massachusetts, alleging infringement of the same three patents asserted against us in the ITC. EcoFactor is seeking permanent injunctions, enhanced damages and attorneys' fees. On December 26, 2019, the court issued an order staying the lawsuit pending the conclusion of the related ITC investigation.

On January 31, 2020, EcoFactor filed a second lawsuit against us in U.S. District Court, Western District of Texas, alleging Alarm.com's products and services infringe four additional U.S. patents owned by EcoFactor. EcoFactor is seeking permanent injunctions, enhanced damages and attorneys' fees. Our response to the complaint is due on May 27, 2020.

Should EcoFactor prevail in the ITC investigation, Alarm.com thermostats manufactured abroad could be excluded from importation into the United States. Should EcoFactor prevail in its district court lawsuits we could be required to pay damages and/or a reasonable royalty for sales of our solution, we could be enjoined from making, using and selling our solution if a license or other right to continue selling such elements is not made available to us, and we could be required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to EcoFactor's claims, the outcome of these legal claims cannot be predicted with certainty and any of these outcomes could result in an adverse effect on our business. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

In addition to the matters described above, we may be required to provide indemnification to certain of our service provider partners for certain claims regarding our solutions. For example, we are incurring costs associated with the indemnification of our service provider ADT, LLC in two ongoing patent infringement suits: Applied Capital, Inc. v. The ADT Corporation et al. and Varatec, LLC v. ADT, LLC.

On July 13, 2016, Applied Capital, Inc., or Applied Capital, filed a lawsuit against ADT, LLC, the ADT Corporation, and Icontrol Networks, Inc. in U.S. District Court, the District of New Mexico. *Applied Capital, Inc v. The ADT Corporation et al.*, D. New Mexico Case No. 1-16-cv-00815. Icontrol was dismissed without prejudice on May 22, 2017. Applied Capital alleges that ADT's sales of ADT Pulse directly and indirectly infringes U.S. Patent Nos. 8,378,817 and 9,728,082, which were allegedly purchased by Applied Capital. Applied Capital is seeking damages and attorneys' fees. ADT answered Applied Capital's amended complaint on July 16, 2018. Among other things, ADT has asserted defenses based on non-infringement and invalidity of the patents-in-suit. On April 5, 2019, Applied Capital filed a lawsuit for breach of contract against Rodney Fox, the inventor of the patents-in-suit, in the Second Judicial District Court, County of Bernalillo in New Mexico State Court (No. D-202-CV-2019-02841). Mr. Fox counterclaimed, alleging that he is the rightful owner of the patents-in-suit. Based on the dispute of ownership, on October 15, 2019, ADT filed a motion to stay in this matter pending its resolution. Applied Capital and Mr. Fox reached settlement and stipulated to dismissal of the New Mexico State Court action on October 31, 2019. The court issued its claim construction order on August 12, 2019, fact discovery closed on November 12, 2019, expert discovery closed on March 9, 2020, and the parties filed opening summary judgment and Daubert motions on April 20, 2020. Applied Capital filed its Second Amended Complaint on January 27, 2020 and ADT answered, adding a claim of inequitable conduct, on February 10, 2020. The pretrial conference is scheduled for September 30, 2020, and trial is set for October 19, 2020.

On March 4, 2019, Varatec, LLC, or Varatec, sued ADT, LLC d/b/a ADT Security Services in U.S. District Court for the Northern District of Illinois. *Varatec, LLC v. ADT, LLC d/b/a ADT Security Services*, N.D. Illinois Case No. 1-19-cv-01543. Varatec alleges that ADT's sales of ADT Pulse directly and indirectly infringe U.S. Patent No. 7,792,256, which was assigned to Varatec. Varatec seeks a permanent injunction, enhanced damages, and attorneys' fees. On May 23, 2019, ADT filed a motion seeking to dismiss the complaint for failure to state a claim, on the basis that the asserted patent fails to claim patent eligible subject matter. On July 3, 2019, third-party Unified Patents Inc. filed a petition seeking inter parties review of the asserted patent by the PTAB. After the completion of briefing of ADT's motion to dismiss, the parties agreed to stay the case pending resolution of the inter partes review, and the court granted the parties' motion on August 14, 2019. Unified Patent's petition for inter parties review was instituted on December 31, 2019 and is currently pending. Varatec filed a notice of voluntary dismissal without prejudice under Fed. R. Civ. P. 41(a) on April 15, 2020, and the court has ratified the dismissal.

Should the plaintiffs prevail on the claims that one or more elements of ADT's products infringe, we could be required to indemnify ADT for damages in the form of a reasonable royalty or ADT could be enjoined from making, using and selling our solution if a license or other right to continue selling our technology is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. The outcome of these legal claims cannot be predicted with certainty. We believe there are valid defenses to the claims made by Applied Capital and Varatec. Based on currently available information, we have determined a loss is not probable or reasonably estimable at this time.

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We may also be a party to litigation and subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business.

Other than the preceding matters, we are not a party to any lawsuit or proceeding that, in the opinion of management, is reasonably possible or probable of having a material adverse effect on our financial position, results of operations or cash flows. We reserve for contingent liabilities based on ASC 450, "Contingencies," when it is determined that a liability, inclusive of defense costs, is probable and reasonably estimable. Litigation is subject to many factors that are difficult to predict, so there can be no assurance that, in the event of a material unfavorable result in one or more claims, we will not incur material costs.

Note 13. Stockholders' Equity

Stock Repurchase Program

On November 29, 2018, our board of directors authorized a stock repurchase program, under which we are authorized to purchase up to an aggregate of \$75.0 million of our outstanding common stock during the two-year period ending November 29, 2020. During the three months ended March 31, 2020, we repurchased 147,153 shares of our common stock under this program for \$5.1 million, which includes applicable commissions and fees. No shares of our common stock were repurchased under this program during the three months ended March 31, 2019.

Note 14. Stock-Based Compensation

Stock-based compensation expense is included in the following line items in the condensed consolidated statements of operations (in thousands):

	Three Months Ended March 31,	
	2020	2019
Sales and marketing	\$ 757	\$ 380
General and administrative	1,782	1,267
Research and development	3,819	2,619
Total stock-based compensation expense	<u>\$ 6,358</u>	<u>\$ 4,266</u>

The following table summarizes the components of non-cash stock-based compensation expense (in thousands):

	Three Months Ended March 31,	
	2020	2019
Stock options and assumed options	\$ 801	\$ 793
Restricted stock units	5,510	3,429
Employee stock purchase plan	47	44
Total stock-based compensation expense	<u>\$ 6,358</u>	<u>\$ 4,266</u>
Tax benefit from stock-based awards	<u>\$ 578</u>	<u>\$ 1,314</u>

We granted an aggregate of 5,000 stock options pursuant to our 2015 Equity Incentive Plan, or the 2015 Plan, during the three months ended March 31, 2020, as compared to an aggregate of 8,000 stock options for the same period in the prior year. There were 63,748 stock options exercised during the three months ended March 31, 2020, as compared to 85,466 stock options for the same period in the prior year. We granted an aggregate of 100,728 restricted stock units during the three months ended March 31, 2020, as compared to an aggregate of 190,250 restricted stock units for the same period in the prior year. There were 23,048 restricted stock units that vested during the three months ended March 31, 2020, as compared to 43,460 restricted stock units vested during the same period in the prior year.

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Note 15. Earnings Per Share

Basic and Diluted Earnings Per Share

The components of basic and diluted earnings per share are as follows (in thousands, except share and per share amounts):

	Three Months Ended March 31,	
	2020	2019
Net income	\$ 8,571	\$ 9,010
Net loss attributable to redeemable noncontrolling interest	236	—
Net income attributable to common stockholders (A)	<u>\$ 8,807</u>	<u>\$ 9,010</u>
Weighted average common shares outstanding — basic (B)	48,725,565	48,172,243
Dilutive effect of stock options and restricted stock units	1,521,422	2,000,575
Weighted average common shares outstanding — diluted (C)	<u>50,246,987</u>	<u>50,172,818</u>
Net income per share:		
Basic (A/B)	\$ 0.18	\$ 0.19
Diluted (A/C)	\$ 0.18	\$ 0.18

The following securities have been excluded from the calculation of diluted weighted average common shares outstanding as the inclusion of these securities would have an anti-dilutive effect:

	Three Months Ended March 31,	
	2020	2019
Stock options	272,876	46,693
Restricted stock units	197,478	181,350
Common stock subject to repurchase	100	777

Our redeemable noncontrolling interest relates to our 85% equity ownership interest in OpenEye. The OpenEye stockholder agreement contains a put option that gives the minority OpenEye stockholders the right to sell their OpenEye shares to us based on the fair value of the shares. The OpenEye stockholder agreement also contains a call option that gives us the right to purchase the remaining OpenEye shares from the minority OpenEye stockholders based on the fair value of the shares. The put and call options can each be exercised beginning in the first quarter of 2023. This redeemable noncontrolling interest is considered temporary equity and we report it between liabilities and stockholders' equity in the condensed consolidated balance sheets. The amount of the net income or loss attributable to redeemable noncontrolling interests is recorded in the condensed consolidated statements of operations.

Note 16. Significant Service Providers

During the three months ended March 31, 2020, our 10 largest revenue service provider partners accounted for 49% of our consolidated revenue, as compared to 53% for the same period in the prior year. One of our service provider partners within the Alarm.com segment individually represented greater than 15% but not more than 20% of our revenue for the three months ended March 31, 2020 and 2019.

One individual service provider partner in the Alarm.com segment represented more than 10% of accounts receivable as of March 31, 2020 and December 31, 2019.

Note 17. Income Taxes

For purposes of interim reporting, our annual effective income tax rate is estimated in accordance with ASC 740-270, "Interim Reporting." This rate is applied to the pre-tax book income of the entities expected to be benefited during the year. Discrete items that impact the tax provision are recorded in the period incurred.

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For the three months ended March 31, 2020, we recorded a provision for income taxes of \$1.2 million, resulting in an effective income tax rate of 12.3%. For the three months ended March 31, 2019, we recorded a provision from income taxes of \$0.2 million, resulting in an effective income tax rate of 2.6%. Our effective tax rates were different from the statutory rate primarily due to research and development tax credits claimed, tax windfall benefits from employee stock-based payment transactions and foreign derived intangible income deductions, partially offset by the impact of state taxes and non-deductible meal and entertainment expenses.

We recognize a valuation allowance if, based on the weight of available evidence, both positive and negative, it is more likely than not that some portion, or all, of net deferred tax assets will not be realized. Due to the uncertainty of realization of certain deferred tax assets acquired in 2017 related to our Canadian net operating losses and research and development tax credits, we established a valuation allowance of \$0.3 million during the second quarter of 2019, which remained at \$0.3 million as of March 31, 2020 and December 31, 2019.

We apply guidance for uncertainty in income taxes that requires the application of a more likely than not threshold to the recognition and de-recognition of uncertain tax positions. If the recognition threshold is met, this guidance permits us to recognize a tax benefit measured at the largest amount of the tax benefit that, in our judgment, is more likely than not to be realized upon settlement. We recorded unrecognized tax benefits of \$0.3 million for research and development tax credits claimed during the three months ended March 31, 2020. We did not record an unrecognized tax benefit during the three months ended March 31, 2019.

As of March 31, 2020 and December 31, 2019, we accrued \$0.4 million and \$0.2 million of total interest expense related to unrecognized tax benefits, respectively. We recognize interest and penalties related to unrecognized tax benefits as a component of income tax expense.

Note 18. Segment Information

We have two reportable segments:

- Alarm.com segment
- Other segment

Our chief operating decision maker is our chief executive officer. Management determined the operational data used by the chief operating decision maker is that of the two reportable segments. Management bases strategic goals and decisions on these segments and the data presented below is used to measure financial results.

Our Alarm.com segment represents our cloud-based and Software platforms for the intelligently connected property and related solutions that contributed 95% of our revenue for the three months ended March 31, 2020, as compared to 93% for the same period in the prior year. Our Other segment is focused on researching, developing and offering residential and commercial automation solutions and energy management products and services in adjacent markets. Inter-segment revenue includes sales of hardware between our segments.

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Management evaluates the performance of its segments and allocates resources to them based on operating income / (loss) as compared to prior periods and current performance levels. The reportable segment operational data is presented in the tables below (in thousands):

Three Months Ended March 31, 2020

	Alarm.com	Other	Intersegment Alarm.com	Intersegment Other	Total
SaaS and license revenue	\$ 87,412	\$ 4,538	\$ —	\$ —	\$ 91,950
Hardware and other revenue	57,528	5,558	(861)	(2,236)	59,989
Total revenue	144,940	10,096	(861)	(2,236)	151,939
Operating income / (loss)	10,817	(872)	41	(119)	9,867

Three Months Ended March 31, 2019

	Alarm.com	Other	Intersegment Alarm.com	Intersegment Other	Total
SaaS and license revenue	\$ 75,402	\$ 4,653	\$ —	\$ —	\$ 80,055
Hardware and other revenue	30,347	4,411	(999)	(1,479)	32,280
Total revenue	105,749	9,064	(999)	(1,479)	112,335
Operating income / (loss)	9,655	(484)	(35)	85	9,221

	Alarm.com	Other	Intersegment Alarm.com	Intersegment Other	Total
Assets as of March 31, 2020	\$ 656,113	\$ 18,957	\$ (50,995)	\$ —	\$ 624,075
Assets as of December 31, 2019	589,952	17,844	(49,997)	—	557,799

Our SaaS and license revenue for the Alarm.com segment included software license revenue of \$9.7 million for the three months ended March 31, 2020, as compared to \$11.0 million for the same period in the prior year. There was no software license revenue recorded for the Other segment during the three months ended March 31, 2020 and 2019.

Depreciation and amortization expense was \$6.4 million for the Alarm.com segment for the three months ended March 31, 2020, as compared to \$5.2 million for the same period in the prior year. Depreciation and amortization expense was less than \$0.1 million for the Other segment for each of the three months ended March 31, 2020 and 2019. Additions to property and equipment were \$2.6 million for the Alarm.com segment for the three months ended March 31, 2020, as compared to \$2.3 million for the same period in the prior year. Additions to property and equipment were \$0.8 million for the Other segment for the three months ended March 31, 2020. There were no additions to property and equipment for the Other segment for the three months ended March 31, 2019.

We derived substantially all of our revenue from North America for the three months ended March 31, 2020 and 2019. Substantially all of our long-lived assets were in North America as of March 31, 2020 and December 31, 2019.

Note 19. Related Party Transactions

Installation Partner

Our installation partner in which we have a 48.2% ownership interest performs installation services for security dealers and also provides installation services for us and certain of our subsidiaries. We account for this investment using the equity method. As of March 31, 2020 and December 31, 2019, our investment balance in our installation partner was zero. During each of the three months ended March 31, 2020 and 2019, we recorded \$0.1 million of cost of hardware and other revenue in connection with this installation partner. As of March 31, 2020 and December 31, 2019, the accounts payable balance to our installation partner was less than \$0.1 million.

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March 31, 2020 and 2019

Affiliate Lease

OpenEye leases its production and administration operations facility from a company that is controlled by certain employees of OpenEye, or the Landlord. The lease term is one year with an expiration date of October 20, 2020. OpenEye can terminate the lease at any time by providing 30 days' prior written notice and the Landlord can terminate the lease by providing 90 days' prior written notice. Total minimum lease payments over the term of the lease are \$0.2 million. During the three months ended March 31, 2020, we recorded less than \$0.1 million of rent expense in connection with this lease arrangement. There was no rent expense recorded in connection with the lease arrangement during the three months ended March 31, 2019. There was no accounts payable balance due to the Landlord under this lease arrangement as of March 31, 2020 or December 31, 2019.

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

You should read the following discussion and analysis of our financial condition and results of operations together with (1) our condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and the related notes and management's discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2019 included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed on February 26, 2020 with the Securities and Exchange Commission, or SEC. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "objective," "ongoing," "plan," "predict," "project," "potential," "should," "will," "would" or the negative or plural of these words or similar expressions or variations and such forward-looking statements include, but are not limited to, statements with respect to the anticipated impact of the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic on our business, results of operations and financial condition, including on our hardware sales and our SaaS and license revenue growth rate; our business strategy, plans and objectives for future operations; continued enhancements of our platform and offerings; our future financial and business performance and the potential impact of trade policies and related tariffs on our cost of hardware revenue and hardware revenue margins. The events described in these forward-looking statements are subject to a number of risks, uncertainties, assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified in the section titled "Risk Factors" set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q and elsewhere in this and in our other SEC filings. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

Alarm.com is the leading platform for the intelligently connected property. We offer a comprehensive suite of cloud-based solutions for smart residential and commercial properties, including interactive security, video monitoring, intelligent automation, energy management and wellness solutions. Millions of property owners depend on our technology to intelligently secure, automate and manage their residential and commercial properties. In the last year alone, our platforms processed more than 200 billion data points generated by over 100 million connected devices. We believe that this scale of subscribers, connected devices and data operations makes us the leader in the connected property market.

Our solutions are delivered through an established network of over 9,000 trusted service providers, who are experts at selling, installing and supporting our solutions. We primarily generate Software-as-a-Service, or SaaS, and license revenue through our service provider partners, who resell these services and pay us monthly fees. These service provider contracts typically have an initial term of one year, with subsequent renewal terms of one year. Our service provider partners have indicated that they typically have three to five-year service contracts with residential and commercial property owners who use our solutions. We also generate hardware and other revenue, primarily from our service provider partners and distributors. Our hardware sales include connected devices that enable our services, such as video cameras, video recorders, gateway modules and smart thermostats. We believe that the length of our service relationships with residential and commercial property owners, combined with our robust platforms and approximately 20 years of operating experience, contribute to a compelling business model.

Our technology platforms are designed to make connected properties safer, smarter and more efficient. Our solutions are used in both smart residential and commercial properties, which we refer to as the connected property market and we have designed our technology platforms for all market participants. This includes not only the residential and commercial property owners who subscribe to our services, but also the hardware partners who manufacture devices that integrate with our platforms and the service provider partners who install and maintain our solutions.

Our service provider partners can deploy our interactive security, video monitoring, intelligent automation, energy management and wellness solutions as stand-alone offerings or as combined solutions to address the needs of a broad range of customers. Our subscribers can seamlessly connect to their property through our family of mobile apps, websites and engagement platforms like voice control through Amazon Echo and Google Home, wearable devices like the Apple Watch and TV applications such as Apple TV and Amazon Fire TV.

Highlights of First Quarter Results

We primarily generate SaaS and license revenue, our largest source of revenue, through our service provider partners who resell our services and pay us monthly fees. Our service provider partners sell, install and support Alarm.com solutions that enable residential and commercial property owners to intelligently secure, connect, control and automate their properties. Our subscribers consist of all of the properties maintained by those residential and commercial property owners to which we are delivering at least one of our solutions. We derive a portion of our revenue from licensing our intellectual property to third parties

on a per customer basis. SaaS and license revenue represented 61% of our revenue during the three months ended March 31, 2020, as compared to 71% in the same period in the prior year.

We also generate SaaS and license revenue from monthly fees charged to service providers on a per subscriber basis for access to our non-hosted software platform, or Software platform. The non-hosted software for interactive security, automation and related solutions is typically deployed and operated by the service provider in its own network operations center. Software license revenue represented 6% of our revenue during the three months ended March 31, 2020, as compared to 10% for the same period in the prior year.

We also generate revenue from the sale of hardware, including video cameras, video recorders, cellular radio modules, thermostats, image sensors and other peripherals, that enables our solutions. We have a rich history of innovation in cellular technology that enables our robust SaaS offering. Our hardware and other revenue also includes our revenue from the sale of perpetual licenses that provide our customers in the commercial market the right to use our video surveillance software for an indefinite period of time in exchange for a one-time license fee. Hardware and other revenue represented 39% of our revenue during the three months ended March 31, 2020, as compared to 29% in the same period in the prior year. We typically expect hardware and other revenue to fluctuate as a percentage of total revenue.

Highlights of our financial performance for the periods covered in this Quarterly Report include:

- SaaS and license revenue increased 15% to \$91.9 million in the three months ended March 31, 2020 from \$80.1 million in the three months ended March 31, 2019. Included in SaaS and license revenue was software license revenue, which decreased to \$9.7 million in the three months ended March 31, 2020 from \$11.0 million in the three months ended March 31, 2019.
- Total revenue increased 35% to \$151.9 million in the three months ended March 31, 2020 from \$112.3 million in the three months ended March 31, 2019.
- Net income decreased to \$8.6 million in the three months ended March 31, 2020 as compared to \$9.0 million in the three months ended March 31, 2019. Net income attributable to common stockholders decreased to \$8.8 million in the three months ended March 31, 2020 as compared to \$9.0 million in the three months ended March 31, 2019.
- Adjusted EBITDA, a non-GAAP measurement of operating performance, increased to \$29.2 million in the three months ended March 31, 2020 from \$24.3 million in the three months ended March 31, 2019.

Please see *Non-GAAP Measures* below in this section of this Quarterly Report for a discussion of the limitations of Adjusted EBITDA (a non-GAAP measure) and a reconciliation of Adjusted EBITDA to net income, the most comparable measurement in accordance with accounting principles generally accepted in the United States, or GAAP, for the three months ended March 31, 2020 and 2019.

Recent Developments

Since December 2019, a novel strain of coronavirus, SARS-CoV-2, causing a disease referred to as COVID-19, has spread globally, including to the United States. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. We have taken precautionary measures intended to help protect our employees, service providers and subscribers, as well as the communities in which we participate, including enabling substantially all of our employees to work remotely. However, the COVID-19 pandemic has been disrupting and will continue to disrupt our supply chain and sales channels for an unknown period of time due to the impact of COVID-19 on manufacturing, production and global transportation, as well as to our sales channels due to restrictions on our service providers' ability to meet with residential and commercial property owners who use our solutions. To date, the COVID-19 pandemic has resulted in a global slowdown of economic activity and it is possible that the continued spread of COVID-19 and prolonged uncertainty with respect to COVID-19 could cause further economic slowdown or recession or cause other unpredictable events, each of which could adversely affect our business, results of operations or financial condition. We expect these events to have a negative impact on our sales and our results of operations, the size and duration of which we are currently unable to predict; however, we do anticipate that for the remainder of 2020 our hardware revenue will be lower in future periods as compared to the first quarter of 2020. We also anticipate that our SaaS and license revenue growth rate may be lower in future periods due to the COVID-19 pandemic as some consumers or small businesses defer or cancel previously anticipated purchases. The challenges posed by COVID-19 on our business are expected to evolve rapidly and we will continue to evaluate our business and operations in light of future developments.

On March 12, 2020, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party. Substantially all of the acquired assets consisted of in-process research and development, or IPR&D. We believe the acquisition of the IPR&D will strengthen our smart intercom capability, including building access security and convenience within the multiple dwelling unit market for residents, guests and deliveries. In consideration for the purchase of the IPR&D, we paid approximately \$1.2 million in cash on March 12, 2020, with the remaining \$0.3 million expected to be paid 18 months following the acquisition date, subject to offset for any indemnification obligations. The \$1.5 million consideration related to IPR&D was expensed at the time of the asset acquisition, as the IPR&D had no alternative future use.

On March 31, 2020, Alarm.com Incorporated, one of our wholly-owned subsidiaries, acquired certain assets of an unrelated third party. Substantially all of the acquired assets consisted of IPR&D. We believe the acquisition of the IPR&D will further our commitment to make significant investments in innovative research and development in the intelligently connected property market to broaden our suite of solutions. In consideration for the purchase of the IPR&D, we paid approximately \$2.1 million in cash on March 31, 2020 and \$0.1 million in December 2019, with the remaining \$0.7 million expected to be paid the later of approximately 12 months following the acquisition date or upon resolution of any pending indemnifications, subject to offset for any indemnification obligations. The \$2.9 million consideration related to IPR&D was expensed at the time of the asset acquisition, as the IPR&D had no alternative future use.

Other Business Metrics

We regularly monitor a number of financial and operating metrics in order to measure our current performance and estimate our future performance. Our other business metrics may be calculated in a manner different from the way similar business metrics used by other companies are calculated and include the following (dollars in thousands):

	Three Months Ended March 31,	
	2020	2019
SaaS and license revenue	\$ 91,950	\$ 80,055
Adjusted EBITDA	29,189	24,252

	Twelve Months Ended March 31,	
	2020	2019
SaaS and license revenue renewal rate	93%	94%

SaaS and License Revenue

SaaS and license revenue is a GAAP measure that we use to measure our current performance and estimate our future performance. We believe that SaaS and license revenue is an indicator of the productivity of our existing service provider partners and their ability to activate and maintain subscribers using our intelligently connected property solutions, our ability to add new service provider partners reselling our solutions, the demand for our intelligently connected property solutions and the pace at which the market for these solutions is growing.

Adjusted EBITDA

Adjusted EBITDA is a non-GAAP measure that represents our net income before interest expense, interest income, other income, net, provision for income taxes, amortization and depreciation expense, stock-based compensation expense, acquisition-related expense and legal costs and settlement fees incurred in connection with non-ordinary course litigation and other disputes, particularly costs involved in ongoing intellectual property litigation. We do not consider these items to be indicative of our core operating performance. The non-cash items include amortization and depreciation expense and stock-based compensation expense. We do not adjust for ordinary course legal expenses resulting from maintaining and enforcing our intellectual property portfolio and license agreements.

Adjusted EBITDA is a key measure that our management uses to understand and evaluate our core operating performance and trends to generate future operating plans, to make strategic decisions regarding the allocation of capital, and to make investments in initiatives that are focused on cultivating new markets for our solutions. In particular, the exclusion of certain expenses in calculating Adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis and, in the case of exclusion of acquisition-related adjustments and certain historical legal expenses, excludes items that we do not consider to be indicative of our core operating performance. Adjusted EBITDA is not a measure calculated in accordance with GAAP and should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Please see Non-GAAP Measures in this section for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income, the most comparable GAAP measurement, for the three months ended March 31, 2020 and 2019.

SaaS and License Revenue Renewal Rate

Our SaaS and license revenue renewal rate is an operating metric. We measure our SaaS and license revenue renewal rate on a trailing 12-month basis by dividing (a) the total SaaS and license revenue recognized during the trailing 12-month period from our subscribers on our Alarm.com platform who were subscribers on the first day of the period, by (b) total SaaS and license revenue we would have recognized during the period from those same subscribers assuming no terminations, or service

level upgrades or downgrades. The SaaS and license revenue renewal rate represents both residential and commercial properties. Our SaaS and license revenue renewal rate is expressed as an annualized percentage. Our service provider partners, who resell our services to our subscribers, have indicated that they typically have three to five-year service contracts with our subscribers. Our SaaS and license revenue renewal rate is calculated across our entire subscriber base on the Alarm.com platform, including subscribers whose contract with their service provider reached the end of its contractual term during the measurement period, as well as subscribers whose contract with their service provider has not reached the end of its contractual term during the measurement period, and is not intended to estimate the rate at which our subscribers renew their contracts with our service provider partners. We believe that our SaaS and license revenue renewal rate allows us to measure our ability to retain and grow our SaaS and license revenue and serves as an indicator of the lifetime value of our subscriber base.

Credit Losses (Topic 326)

On June 16, 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*," or Topic 326, which provides guidance designed to provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. From November 2018 to May 2019, amendments to Topic 326 were issued to clarify numerous accounting topics. When determining such expected credit losses, the guidance requires companies to apply a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The amendment was effective for us beginning on January 1, 2020.

On January 1, 2020, we adopted Topic 326 by applying the modified retrospective approach to our trade receivables and our notes receivable that were outstanding as of that date, which required us to record the initial effect of Topic 326 as a cumulative-effect adjustment to retained earnings on January 1, 2020.

The adoption of Topic 326 resulted in the recording of the following amounts on our condensed consolidated balance sheets (in thousands):

Balance Sheet Caption	As of January 1, 2020
Accumulated deficit	\$ 816
Accounts receivable, net	(367)
Other current assets	(83)
Other assets	(366)

The adoption of Topic 326 did not materially impact our condensed consolidated statements of operations, condensed consolidated statement of equity or our condensed consolidated statements of cash flows.

Components of Operating Results

Our fiscal year ends on December 31. The key elements of our operating results include:

Revenue

We derive our revenue from three primary sources: the sale of cloud-based SaaS services on our integrated Alarm.com platform, the sale of licenses and services on the Software platform and the sale of hardware products. We sell our platform and hardware solutions to service provider partners that resell our solutions and hardware to residential and commercial property owners, who are the service provider partners' customers.

SaaS and License Revenue. We generate the majority of our SaaS and license revenue primarily from monthly fees charged to our service provider partners on a per subscriber basis for access to our cloud-based intelligently connected property platform and related solutions. Our fees per subscriber vary based upon the service plan and features utilized.

We offer multiple service level packages for our platform solutions including a range of solutions and a range of a la carte add-ons for additional features. The fee paid by our service provider partners each month for the delivery of our solutions is based on the combination of packages and add-ons enabled for each subscriber. We utilize tiered pricing plans where our service provider partners may receive prospective pricing discounts driven by volume.

We also generate SaaS and license revenue from the fees paid to us when we license our intellectual property to third parties for use of our patents. In addition, in certain markets our EnergyHub subsidiary sells its demand response service for an annual service fee, with pricing based on the number of subscribers or amount of aggregate electricity demand made available for a utility's or market's control.

Software License Revenue. Our SaaS and license revenue also includes our software license revenue from monthly fees charged to service providers on a per subscriber basis for access to our Software platform. The non-hosted software for interactive security, automation and related solutions is typically deployed and operated by the service provider in its own network operations center. Our agreements for the Software platform solution typically include software and services, such as post-contract customer support, or PCS. Software license revenue included in SaaS and license revenue is expected to continue to decline over time as we transition subscribers to our cloud-based hosted platform.

Hardware and Other Revenue. We generate hardware and other revenue primarily from the sale of video cameras, video recorders and cellular radio modules that provide access to our cloud-based platforms and, to a lesser extent, the sale of other devices, including image sensors and peripherals. We primarily transfer hardware to our customers upon delivery to the customer, which corresponds with the time at which the customer obtains control of the hardware. We record a reserve against revenue for hardware returns based on historical returns.

Our hardware and other revenue also includes our revenue from the sale of perpetual licenses that provide our customers in the commercial market the right to use our OpenEye video surveillance software for an indefinite period of time in exchange for a one-time license fee, which is generally paid at contract inception. Hardware and other revenue may also include activation fees charged to some of our service provider partners for activation of a new subscriber account on our platforms, as well as fees paid by service provider partners for our marketing services. The decision whether to charge an activation fee is based in part on the expected number of subscribers to be added by our service provider partners and as a result, many of our largest service provider partners do not pay an activation fee.

As a result of the global COVID-19 pandemic, governments, public institutions and other organizations in many countries and localities where COVID-19 has been detected are taking certain emergency measures to combat its spread, including imposing lockdowns, shelter-in-place orders, quarantines, restrictions on travel and gatherings and the extended shutdown non-essential businesses that cannot be conducted remotely. We have seen and anticipate we will continue to see some disruption to our hardware supply chain due to the impact of COVID-19 on manufacturing, production and global transportation, as well as to our sales channels due to restrictions on our service providers' ability to meet with residential and commercial property owners who use our solutions. In addition, the COVID-19 pandemic has resulted in a global slowdown of economic activity that has and for an unknown period of time will likely continue to decrease demand for a broad variety of goods and services. As the future impact on global supply chains from COVID-19 is difficult to predict, the extent to which COVID-19 may negatively affect our hardware revenue is uncertain; however, we do anticipate that for the remainder of 2020 our hardware revenue will be lower in future periods as compared to the first quarter of 2020. We also anticipate that our SaaS and license revenue growth rate may be lower in future periods due to the COVID-19 pandemic as some consumers or small businesses defer or cancel previously anticipated purchases.

Cost of Revenue

Our cost of SaaS and license revenue primarily includes the amounts paid to wireless network providers and, to a lesser extent, the costs of running our network operations centers which are expensed as incurred, as well as patent and royalty costs in connection with technology licensed from third-party providers. Our cost of SaaS and license revenue also includes our cost of software license revenue, which primarily includes the payroll and payroll-related costs of the department dedicated to providing service exclusively to those service providers that host the Software platform. Our cost of hardware and other revenue primarily includes cost of raw materials, tooling and amounts paid to our third-party manufacturer for production and fulfillment of our cellular radio modules and image sensors, and procurement costs for our video cameras and video recorders, which we purchase from an original equipment manufacturer, and other devices. Our cost of hardware and other revenue also includes royalty costs in connection with technology licensed from third-party providers.

We record the cost of SaaS and license revenue as expenses are incurred, which corresponds to the delivery period of our services to our subscribers. We record the cost of hardware and other revenue primarily when the hardware and other services are delivered to the service provider partner, which occurs when control of the hardware and other services transfers to the service provider partner. Our cost of revenue excludes amortization and depreciation shown in operating expenses.

In 2019, the U.S. administration imposed significant changes to U.S. trade policy with respect to China. Tariffs have subjected certain Alarm.com products manufactured overseas to additional import duties of up to 25%. The amount of the import tariff and the number of products subject to tariffs have changed numerous times based on action by the U.S. administration. Approximately one-third to one-half of the finished goods hardware products that we sell to our service provider partners are imported from China and could be subject to increased tariffs. While the additional import duties resulted in an increase to our cost of hardware revenue, these import duties had a modest impact on hardware revenue margins. We continue to monitor the changes in tariffs. If tariffs are increased or are expanded to apply to more of our products, such actions may increase our cost of hardware revenue and reduce our hardware revenue margins in the future.

Operating Expenses

Our operating expenses consist of sales and marketing, general and administrative, research and development and amortization and depreciation expenses. Salaries, bonuses, stock-based compensation, benefits and other personnel related costs are the most significant components of each of these expense categories, excluding amortization and depreciation. We include stock-based compensation expense in connection with the grant of stock options and other forms of equity compensation in the applicable operating expense category based on the respective equity award recipient's function (sales and marketing, general and administrative or research and development). We grew from 938 employees as of March 31, 2019 to 1,227 employees as of March 31, 2020, and we expect to continue to hire new employees to support the projected future growth of our business.

Sales and Marketing Expense. Sales and marketing expense consists primarily of personnel and related expenses for our sales and marketing teams, including salaries, bonuses, stock-based compensation, benefits, travel, and commissions. Our sales and marketing teams engage in sales, account management, service provider partner support, advertising, promotion of our products and services and marketing.

The number of employees in sales and marketing functions increased from 313 as of March 31, 2019 to 422 as of March 31, 2020. We expect to continue to invest in our sales and marketing activities to expand our business both domestically and internationally. We intend to increase the size of our sales force and our service provider partner support team to provide additional support to our existing service provider partner base to drive their productivity in selling our solutions as well as to enroll new service provider partners in North America and in international markets.

General and Administrative Expense. General and administrative expense consists primarily of personnel and related expenses for our administrative, legal, human resources, finance and accounting personnel, including salaries, bonuses, stock-based compensation, benefits and other personnel costs. Additional expenses included in this category are legal costs, including those that are incurred to defend and license our intellectual property, as well as non-personnel costs, such as travel related expenses, rent, subcontracting and professional fees, audit fees, tax services, and insurance expenses. Also included in general and administrative expenses are credit losses and acquisition-related expenses, which consist primarily of legal, accounting and professional service fees directly related to acquisitions, valuation gains or losses on acquisition-related contingent liabilities.

The number of employees in general and administrative functions increased from 106 as of March 31, 2019 to 155 as of March 31, 2020. Excluding intellectual property litigation and acquisition-related costs, we expect general and administrative costs to increase prospectively as our business grows. This includes cost increases related to accounting, finance, and legal personnel, additional external legal, audit fees and other expenses associated with regulations governing public companies. While somewhat unpredictable, we also expect to continue to incur costs related to litigation involving intellectual property. See the section of this Quarterly Report titled "Legal Proceedings" for additional information regarding litigation matters.

Research and Development Expense. Research and development expense consists primarily of personnel and related expenses for our employees working on our product development and software and device engineering teams, including salaries, bonuses, stock-based compensation, benefits and other personnel costs. Also included are non-personnel costs such as consulting and professional fees paid to third-party development resources as well as acquisition costs of IPR&D with no alternative future use.

The number of employees in research and development functions increased from 519 as of March 31, 2019 to 650 as of March 31, 2020. Our research and development efforts are focused on innovating new features and enhancing the functionality of our platforms and the solutions we offer to our service provider partners and subscribers. We will also continue to invest in efforts to extend our platforms to adjacent markets and internationally to maintain our leadership position in the development of intelligently connected property technology, and continued enhancement of our Enterprise Tools platform for our service provider partners.

Amortization and Depreciation. Amortization and depreciation consists of amortization of intangible assets originating from our acquisitions as well as our internally-developed capitalized software. Our depreciation expense is related to investments in property and equipment. Acquired intangible assets include developed technology, customer related intangibles, trademarks and trade names. We expect in the near term that amortization and depreciation may fluctuate based on our acquisition activity, development of our platforms and capitalized expenditures.

Interest Expense

Interest expense consists of interest expense associated with our credit facility. On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with Silicon Valley Bank, or SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. The 2017 Facility is available to us to refinance existing debt and for general corporate and working capital purposes as permitted under the terms of the 2017 Facility. Interest expense is expected to increase in 2020 as compared to 2019 due to the \$50.0 million borrowed under the 2017 Facility as a precautionary measure in order to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic.

Interest Income

Interest income consists of interest income earned on our cash and cash equivalents and our notes receivable.

Other Income, Net

Other income, net primarily consists of non-operating and miscellaneous income and expense.

Provision for Income Taxes

We are subject to U.S. federal, state and local income taxes as well as foreign income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. As a result, we recognize tax liabilities based on estimates of whether additional taxes will be due. Our effective tax rates were different from the statutory rate primarily due to research and development tax credits claimed, tax windfall benefits from employee stock-based payment transactions and foreign derived intangible income deductions, partially offset by the impact of state taxes and non-deductible meal and entertainment expenses. We recognize excess tax windfall benefits on a discrete basis in the quarter in which it occurs, and we anticipate that our effective tax rate will vary from quarter to quarter depending on our stock price and exercises of stock options under our equity incentive plans each period.

Results of Operations

The following table sets forth our unaudited selected condensed consolidated statements of operations and data as a percentage of revenue for the periods presented (in thousands). Certain previously reported amounts in the condensed consolidated statements of operations for the three months ended March 31, 2019 have been reclassified to conform to our current presentation to reflect interest income as a separate line item, which was previously included in other income, net.

	Three Months Ended March 31,			
	2020		2019	
Revenue:				
SaaS and license revenue	\$ 91,950	61 %	\$ 80,055	71 %
Hardware and other revenue	59,989	39	32,280	29
Total revenue	151,939	100	112,335	100
Cost of revenue ⁽¹⁾ :				
Cost of SaaS and license revenue	12,328	8	12,325	11
Cost of hardware and other revenue	45,652	30	26,625	24
Total cost of revenue	57,980	38	38,950	35
Operating expenses:				
Sales and marketing ⁽²⁾	17,075	11	13,228	12
General and administrative ⁽²⁾	20,865	14	19,212	17
Research and development ⁽²⁾	39,730	26	26,496	23
Amortization and depreciation	6,422	4	5,228	5
Total operating expenses	84,092	55	64,164	57
Operating income	9,867	7	9,221	8
Interest expense	(645)	—	(821)	(1)
Interest income	459	—	808	1
Other income, net	92	—	44	—
Income before income taxes	9,773	7	9,252	8
Provision for income taxes	1,202	1	242	—
Net income	\$ 8,571	6 %	\$ 9,010	8 %

(1) Excludes amortization and depreciation shown in operating expenses below.

(2) Operating expenses include stock-based compensation expense as follows (in thousands):

	Three Months Ended March 31,	
	2020	2019
Stock-based compensation expense data:		
Sales and marketing	\$ 757	\$ 380
General and administrative	1,782	1,267
Research and development	3,819	2,619
Total stock-based compensation expense	\$ 6,358	\$ 4,266

The following table sets forth the components of cost of revenue as a percentage of revenue:

	Three Months Ended March 31,	
	2020	2019
Components of cost of revenue as a percentage of revenue:		
Cost of SaaS and license revenue as a percentage of SaaS and license revenue	13%	15%
Cost of hardware and other revenue as a percentage of hardware and other revenue	76%	82%
Total cost of revenue as a percentage of total revenue	38%	35%

Comparison of the Three Months Ended March 31, 2020 to March 31, 2019

The following tables in this section set forth our selected condensed consolidated statements of operations (in thousands), data for the percentage change and data as a percentage of revenue for the periods presented. Certain previously reported amounts in the condensed consolidated statements of operations for the three months ended March 31, 2019 have been reclassified to conform to our current presentation to reflect interest income as a separate line item, which was previously included in other income, net.

Revenue

	Three Months Ended March 31,		% Change
	2020	2019	
Revenue			
SaaS and license revenue	\$ 91,950	\$ 80,055	15%
Hardware and other revenue	59,989	32,280	86
Total revenue	<u>\$ 151,939</u>	<u>\$ 112,335</u>	35%

The \$39.6 million increase in total revenue for the three months ended March 31, 2020 as compared to the same period in the prior year was primarily the result of a \$27.7 million, or 86%, increase in our hardware and other revenue and a \$11.9 million, or 15%, increase in our SaaS and license revenue. Our software license revenue included within SaaS and license revenue decreased \$1.3 million to \$9.7 million during the three months ended March 31, 2020 as compared to \$11.0 million during the same period in the prior year, which decrease was primarily the result of the continuing transition of customers from non-hosted software to our cloud based hosted platform. The \$12.0 million increase in our Alarm.com segment SaaS and license revenue for the three months ended March 31, 2020 was primarily due to growth in our subscriber base, including the revenue impact from subscribers we added in 2019. The increase in hardware and other revenue for the three months ended March 31, 2020 as compared to the same period in the prior year was primarily from the Alarm.com segment and was due to an increase in the volume of video cameras sold as well as the increased revenue from our acquisition of 85% of the issued and outstanding capital stock of PC Open Incorporated, a Washington corporation, doing business as OpenEye, on October 21, 2019. The \$0.1 million decrease in SaaS and license revenue for our Other segment for the three months ended March 31, 2020 as compared to the same period in the prior year was due to a decrease in sales of our energy management and demand response solutions partially offset by an increase in sales of our property management and heating, ventilation and air conditioning, or HVAC, solutions.

Cost of Revenue

	Three Months Ended March 31,		% Change
	2020	2019	
Cost of revenue ⁽¹⁾			
Cost of SaaS and license revenue	\$ 12,328	\$ 12,325	—%
Cost of hardware and other revenue	45,652	26,625	71
Total cost of revenue	<u>\$ 57,980</u>	<u>\$ 38,950</u>	49%
% of total revenue	38%	35%	

(1) Excludes amortization and depreciation shown in operating expenses.

The \$19.0 million increase in cost of revenue for the three months ended March 31, 2020 as compared to the same period in the prior year was the result of a \$19.0 million, or 71%, increase in cost of hardware and other revenue. Our cost of SaaS and license revenue and our cost of software license revenue included within cost of SaaS and license revenue remained relatively consistent for the three months ended March 31, 2020 as compared to the same period in the prior year. The increase in cost of Alarm.com segment hardware and other revenue related primarily to an increase in the number of hardware units shipped during the three months ended March 31, 2020 as compared to the same period in the prior year as well as the increased cost of revenue from our acquisition of 85% of the issued and outstanding capital stock of OpenEye on October 21, 2019. Cost of hardware and other revenue as a percentage of hardware and other revenue was 76% for the three months ended March 31, 2020 and 82% for the same period in the prior year. Cost of SaaS and license revenue as a percentage of SaaS and license revenue was 13% for the three months ended March 31, 2020 and 15% for the same period in the prior year. Cost of software license revenue as a percentage of software license revenue was 4% and 3% for the three months ended March 31, 2020 and 2019, respectively. The decrease in cost of hardware and other revenue as a percentage of hardware and other revenue for the three months ended March 31, 2020 as compared to the same period in the prior year is a reflection of the mix of product sales during the periods.

Sales and Marketing Expense

	Three Months Ended March 31,		% Change
	2020	2019	
Sales and marketing	\$ 17,075	\$ 13,228	29%
<i>% of total revenue</i>	<i>11%</i>	<i>12%</i>	

The \$3.8 million increase in sales and marketing expense for the three months ended March 31, 2020 as compared to the same period in the prior year was primarily due to increases in headcount for our sales team and our service provider partner support team to support our growth. As a result, our personnel and related costs for our Alarm.com segment, including salary, benefits, stock-based compensation and travel expenses, increased by \$3.6 million for the three months ended March 31, 2020. Additionally, recruiting costs and costs for external consultants increased by \$0.1 million for the three months ended March 31, 2020 for our Alarm.com segment as compared to the same period in the prior year. These increases were partially offset by a \$0.2 million decrease in our marketing expense for our Alarm.com segment for the three months ended March 31, 2020 as compared to the same period in the prior year. Sales and marketing expense from our Other segment increased \$0.3 million for the three months ended March 31, 2020 as compared to the same period in the prior year, primarily due to increases in headcount for our sales team. The number of employees in sales and marketing functions increased from 313 as of March 31, 2019 to 422 as of March 31, 2020.

General and Administrative Expense

	Three Months Ended March 31,		% Change
	2020	2019	
General and administrative	\$ 20,865	\$ 19,212	9%
<i>% of total revenue</i>	<i>14%</i>	<i>17%</i>	

The \$1.7 million increase in general and administrative expense for the three months ended March 31, 2020 as compared to the same period in the prior year was primarily due to a \$1.6 million increase in personnel and related costs for our Alarm.com segment due to an increase in employee headcount to support our operational growth and a \$1.1 million increase in the provision for credit losses primarily due to increases in the accounts receivable balance. Additionally, expense for external consultants increased \$0.7 million for the three months ended March 31, 2020 for our Alarm.com segment as compared to the same period in the prior year. These increases were partially offset by a \$1.9 million decrease in legal expenses within our Alarm.com segment resulting from intellectual property litigation during the three months ended March 31, 2019 which did not occur during the three months ended March 31, 2020. General and administrative expenses from our Other segment remained relatively consistent for the three months ended March 31, 2020 as compared to the same period in the prior year. The number of employees in general and administrative functions increased from 106 as of March 31, 2019 to 155 as of March 31, 2020.

Research and Development Expense

	Three Months Ended March 31,		% Change
	2020	2019	
Research and development	\$ 39,730	\$ 26,496	50%
<i>% of total revenue</i>	26%	23%	

The \$13.2 million increase in research and development expense for the three months ended March 31, 2020 as compared to the same period in the prior year was primarily due to an increase in headcount of employees in research and development functions. Our personnel and related costs for our Alarm.com segment increased by \$7.6 million for the three months ended March 31, 2020 as compared to the same period in the prior year. Additionally, the increase in research and development expense is due to \$4.4 million of in-process research and development we acquired in March 2020 as well as a \$0.4 million increase in expenses for external consultants for the three months ended March 31, 2020, as compared to the same period in the prior year. Research and development expense from our Other segment increased \$0.4 million for the three months ended March 31, 2020 as compared to the same period in the prior year, primarily due to personnel and related costs, including salary, benefits and stock-based compensation. The number of employees in research and development functions increased from 519 as of March 31, 2019 to 650 as of March 31, 2020.

Amortization and Depreciation

	Three Months Ended March 31,		% Change
	2020	2019	
Amortization and depreciation	\$ 6,422	\$ 5,228	23%
<i>% of total revenue</i>	4%	5%	

Amortization and depreciation increased \$1.2 million for the three months ended March 31, 2020, as compared to the same period in the prior year, primarily due to the intangible assets that were acquired in connection with the purchase of 85% of the issued and outstanding capital stock of OpenEye on October 21, 2019.

Interest Expense

	Three Months Ended March 31,		% Change
	2020	2019	
Interest expense	\$ (645)	\$ (821)	(21)%
<i>% of total revenue</i>	—%	(1)%	

Interest expense decreased \$0.2 million for the three months ended March 31, 2020 as compared to the same period in the prior year, primarily due to a decrease in the effective interest rate on the 2017 Facility resulting from decreases in the Eurodollar Base Rate, or LIBOR, and the decrease in carrying value of the 2017 Facility throughout most of the three months ended March 31, 2020 as compared to the same period in the prior year.

Interest Income

	Three Months Ended March 31,		% Change
	2020	2019	
Interest income	\$ 459	\$ 808	(43)%
<i>% of total revenue</i>	—%	1%	

Interest income decreased \$0.3 million for the three months ended March 31, 2020 as compared to the same period in the prior year, primarily due to a decrease in interest income earned on our cash balance and interest income earned on notes receivable.

Other Income, Net

	Three Months Ended March 31,		% Change
	2020	2019	
Other income, net	\$ 92	\$ 44	109%
% of total revenue	—%	—%	

Other income, net remained relatively consistent for the three months ended March 31, 2020 as compared to the same period in the prior year.

Provision for Income Taxes

	Three Months Ended March 31,		% Change
	2020	2019	
Provision for income taxes	\$ 1,202	\$ 242	397%
% of total revenue	1%	—%	

The provision for incomes taxes increased \$1.0 million for the three months ended March 31, 2020 as compared to the same period in the prior year. Our effective tax rates were 12.3% and 2.6% for the three months ended March 31, 2020 and 2019, respectively. The increase in the provision for income taxes was primarily related to decreases in tax windfall benefits from employee stock-based payment transactions for the three months ended March 31, 2020 as compared to the same period in the prior year.

Segment Information

We have two reportable segments: Alarm.com and Other. Our Alarm.com segment represents our cloud-based and Software platforms for the intelligently connected property and related solutions that contributed 95% of our revenue for the three months ended March 31, 2020 as compared to 93% for the same period in the prior year. Our Other segment is focused on researching, developing and offering residential and commercial automation solutions and energy management products and services in adjacent markets. The consolidated subsidiaries that make up our Other segment are in the investment stage and have incurred significant operating expenses relative to their revenue.

Our Alarm.com segment increased from 865 employees as of March 31, 2019 to 1,137 employees as of March 31, 2020. Our Other segment increased from 73 employees as of March 31, 2019 to 90 employees as of March 31, 2020. Inter-segment revenue includes sales of hardware between our segments.

The following table presents our revenue, inter-segment revenue and operating expenses by segment (in thousands):

	Three Months Ended March 31,					
	2020			2019		
	SaaS and license revenue	Hardware and other revenue	Operating expenses	SaaS and license revenue	Hardware and other revenue	Operating expenses
Alarm.com	\$ 87,412	\$ 57,528	\$ 78,761	\$ 75,402	\$ 30,347	\$ 59,617
Other	4,538	5,558	5,331	4,653	4,411	4,547
Intersegment Alarm.com	—	(861)	—	—	(999)	—
Intersegment Other	—	(2,236)	—	—	(1,479)	—
Total	\$ 91,950	\$ 59,989	\$ 84,092	\$ 80,055	\$ 32,280	\$ 64,164

Our SaaS and license revenue for the Alarm.com segment included software license revenue of \$9.7 million for the three months ended March 31, 2020, as compared to \$11.0 million for the same period in the prior year. There was no software license revenue recorded for the Other segment during the three months ended March 31, 2020 and 2019.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue, costs and expenses during the reported period. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions, and to the extent that there are differences between our estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. During the first quarter of 2020, we adopted Topic 326. See Note 2 to our condensed consolidated financial statements for more information. Except as disclosed in Note 2, there were no other material changes to our use of estimates or other critical accounting policies from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC on February 26, 2020, or Annual Report.

Recently Issued Accounting Standards

See Note 2 of our condensed consolidated financial statements for information related to recently issued accounting standards.

Liquidity and Capital Resources

Working Capital

The following table summarizes our cash and cash equivalents, accounts receivable, net and working capital, for the periods indicated (in thousands):

	March 31, 2020	December 31, 2019
Cash and cash equivalents	\$ 171,732	\$ 119,629
Accounts receivable, net of allowance for credit losses of \$4,789 and \$2,584, respectively, and net of allowance for product returns of \$1,224 and \$1,075, respectively	81,894	76,373
Working capital	231,642	167,879

We define working capital as current assets minus current liabilities. Our cash and cash equivalents as of March 31, 2020 are available for working capital purposes. We do not enter into investments for trading purposes, and our investment policy is to invest any excess cash in short term, highly liquid investments that limit the risk of principal loss; therefore, our cash and cash equivalents are held in demand deposit accounts that generate very low returns.

Liquidity and Capital Resources

As of March 31, 2020, we had \$171.7 million in cash and cash equivalents. We consider all highly liquid instruments purchased with an original maturity from the date of purchase of three months or less to be cash equivalents. To date, we have principally financed our operations through cash generated by operating activities and, to a lesser extent, through private and public equity financings.

We believe our existing cash and cash equivalents, together with our 2017 Facility, and our future cash flows from operating activities will be sufficient to meet our anticipated operating cash needs for at least the next 12 months. Over the final nine months of fiscal year 2020, we expect our capital expenditure requirements to be approximately \$15.0 million, primarily related to the continued build out of our leased office space as well as purchases of computer software and equipment.

Our future working capital and capital expenditure requirements will depend on many factors, including the impact of the global COVID-19 pandemic on the economy and our operations, the rate of our revenue growth, the amount and timing of our investments in human resources and capital equipment, future acquisitions and investments, and the timing and extent of our introduction of new solutions and platform and solution enhancements. As the impact of the COVID-19 pandemic on the economy and our operations evolves, we will continue to assess our liquidity needs. To the extent our cash and cash equivalents, together with our 2017 Facility, and cash flows from operating activities are insufficient to fund our future activities, we may need to borrow additional funds through our bank credit arrangements or raise funds from public or private equity or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness would likely have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. Any additional equity financing would be dilutive to our current stockholders.

Sources of Liquidity

Our 2017 Facility is a revolving credit facility with SVB, as administrative agent, and a syndicate of lenders to finance working capital and certain permitted acquisitions and investments. The 2017 Facility is available to us to refinance existing debt and for general corporate and working capital purposes including acquisitions, and has a current borrowing capacity of \$125.0 million. We have the option to increase the borrowing capacity of the 2017 Facility to \$175.0 million with the consent of the lenders. During the three months ended March 31, 2020, we borrowed \$50.0 million under the 2017 Facility as a precautionary measure in order to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic.

As of March 31, 2020, \$113.0 million was outstanding under the 2017 Facility, no letters of credit were outstanding and \$12.0 million remained available for borrowing under the 2017 Facility. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio and a fixed charge coverage ratio, and limit our capacity to incur other indebtedness, liens, make certain payments including dividends, and enter into other transactions without approval of the lenders. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. As of March 31, 2020, we were in compliance with all covenants under the 2017 Facility. Our outstanding amounts under the 2017 Facility are due at maturity in October 2022. The 2017 Facility is discussed in more detail below under "Debt Obligations."

Dividends

We did not declare or pay dividends during the three months ended March 31, 2020 and 2019. We cannot provide any assurance that we will declare or pay cash dividends on our common stock in the future. We currently anticipate that we will retain all of our future earnings, if any, for use in the operation and expansion of our business and we do not anticipate paying cash dividends in the foreseeable future. Additionally, our ability to pay dividends on our common stock is limited by restrictions under the terms of the agreements governing the 2017 Facility. Payment of future cash dividends, if any, will be at the discretion of the board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements of current or then-existing debt instruments and other factors the board of directors deems relevant.

Historical Cash Flows

The following table sets forth our cash flows for the periods indicated (in thousands):

	Three Months Ended March 31,	
	2020	2019
Cash flows from / (used in) operating activities	\$ 12,900	\$ (1,187)
Cash flows used in investing activities	(7,013)	(23,023)
Cash flows from financing activities	46,216	591

Operating Activities

Cash flows from operating activities have typically been generated from our net income and by changes in our operating assets and liabilities, particularly from accounts receivable and inventory, adjusted for non-cash expense items such as amortization and depreciation, deferred income taxes and stock-based compensation.

For the three months ended March 31, 2020, cash flows from operating activities were \$12.9 million, compared to \$1.2 million cash flows used in operating activities for the same period in the prior year. This \$14.1 million increase in cash flows from operating activities was due to a \$9.2 million increase in non-cash and other reconciling items and a \$5.3 million increase in cash from operating assets and liabilities, partially offset by a \$0.4 million decrease in net income.

The \$9.2 million increase in non-cash and other reconciling items was primarily due to \$3.3 million cash paid to acquire in-process research and development in March 2020 that was reclassified and presented as cash flows used in investing activities. Additionally, the increase in non-cash and other reconciling items was due to a \$2.1 million increase in stock-based compensation resulting from additional grants of stock options and restricted stock units during the three months ended March 31, 2020 and a \$1.2 million increase in amortization expense from intangible assets that were acquired in connection with the purchase of 85% of the issued and outstanding capital stock of OpenEye on October 21, 2019. The \$5.3 million increase in cash from operating assets and liabilities was primarily due to differences in timing of payments of disbursements, partially offset by the prepayment of \$4.7 million for long lead-time parts related to inventory during the three months ended March 31, 2020 that did not occur during the same period in the prior year.

Investing Activities

Our investing activities typically include acquisitions, capital expenditures, notes receivable issued to companies with offerings complementary to ours and proceeds from the repayment of those notes receivable. Our capital expenditures have primarily been for general business use, including leasehold improvements as we have expanded our office space to accommodate our growth in headcount, computer equipment used internally and expansion of our network operations centers.

For the three months ended March 31, 2020, our cash flows used in investing activities was \$7.0 million, as compared to cash flows used in investing activities of \$23.0 million for the same period in the prior year. The \$16.0 million decrease in cash flows used in investing activities was primarily due to the \$16.4 million paid in March 2019 to acquire a secured promissory note as well as additional funding provided to one of our hardware suppliers under convertible promissory notes during the three months ended March 31, 2019 that did not occur during the three months ended March 31, 2020. This decrease was partially offset by a \$3.3 million increase in cash flows used in investing activities to acquire in-process research and development in March 2020.

Financing Activities

Cash generated by financing activities includes borrowings under the 2017 Facility and proceeds from the issuance of common stock from employee stock option exercises and from our employee stock purchase plan. Cash used in financing activities typically includes repurchases of common stock and repayments of debt.

For the three months ended March 31, 2020, cash flows from financing activities was \$46.2 million, compared to \$0.6 million for the same period in the prior year. The \$45.6 million increase in cash flows from financing activities was primarily due to the borrowing of \$50.0 million under our 2017 Facility during the three months ended March 31, 2020 which was partially offset by our use of \$5.1 million to purchase shares of treasury stock, as compared to the \$1.0 million repayment of the outstanding balance of the 2017 Facility during three months ended March 31, 2019.

Contractual Obligations

As of March 31, 2020, there were no material changes in our contractual obligations and commitments from those disclosed in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report, other than the \$50.0 million borrowed under our 2017 Facility in March 2020 and the amendment to the lease for our corporate headquarters executed in March 2020, which includes maturities of lease liabilities as follows: \$0.1 million in 2020, \$0.6 million in 2021, \$0.8 million in 2022, \$0.7 million in 2023, \$0.5 million in 2024 and \$0.8 million in 2025 and beyond.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in off-balance sheet financing arrangements. In addition, we do not engage in trading activities involving non-exchange traded contracts.

Debt Obligations

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. The 2017 Facility matures in October 2022 and includes an option to further increase the borrowing capacity to \$175.0 million with the consent of the lenders. Costs incurred in connection with the 2017 Facility were capitalized and are being amortized as interest expense over the term of the 2017 Facility. The 2017 Facility is secured by substantially all of our assets, including our intellectual property. During the three months ended March 31, 2020, we borrowed \$50.0 million under the 2017 Facility as a precautionary measure in order to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic. During the three months ended March 31, 2019, we repaid \$1.0 million of the outstanding balance of the 2017 Facility.

The outstanding principal balance on the 2017 Facility accrues interest at a rate equal to, at our option, either (1) LIBOR, plus an applicable margin based on our consolidated leverage ratio, or (2) the highest of (a) the Wall Street Journal prime rate, (b) the Federal Funds rate plus 0.50%, or (c) LIBOR plus 1.00% plus an applicable margin based on our consolidated leverage ratio. For the three months ended March 31, 2020, we elected for the outstanding principal balance to accrue interest at LIBOR plus 1.50%, LIBOR plus 1.75%, LIBOR plus 2.00%, and LIBOR plus 2.50% when our consolidated leverage ratio is less than 1.00:1.00, greater than or equal to 1.00:1.00 but less than 2.00:1.00, greater than or equal to 2.00:1.00 but less than 3.00:1.00 and greater than or equal to 3.00:1.00, respectively. The 2017 Facility also carries an unused line commitment fee of 0.20%. For the three months ended March 31, 2020, the effective interest rate on the 2017 Facility was 3.79%, as compared to 4.88% for the same period in the prior year.

The carrying value of the 2017 Facility was \$113.0 million and \$63.0 million as of March 31, 2020 and December 31, 2019, respectively. The 2017 Facility includes a variable interest rate that approximates market rates and, as such, we classified the liability as Level 2 within the fair value hierarchy and determined that the carrying amount of the 2017 Facility approximated its fair value as of March 31, 2020 and December 31, 2019. The 2017 Facility contains various financial and other covenants that require us to maintain a maximum consolidated leverage ratio not to exceed 3.25:1.00 and a consolidated fixed charge coverage ratio of at least 1.25:1.00. As of March 31, 2020, we were in compliance with all financial and non-financial covenants and there were no events of default. The 2017 Facility also contains customary conditions to borrowings and events of default and contains various negative covenants, including covenants that restrict our ability to dispose of assets, merge with or acquire other entities, incur indebtedness, incur encumbrances, make certain payments including dividends, make investments or engage in transactions with affiliates without approval of the lenders.

On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018.

Non-GAAP Measures

We define Adjusted EBITDA as our net income before interest expense, interest income, other income, net, provision for income taxes, amortization and depreciation, stock-based compensation expense, acquisition-related expense and legal costs and settlement fees incurred in connection with non-ordinary course litigation and other disputes, particularly costs involved in ongoing intellectual property litigation. We do not consider these items to be indicative of our core operating performance. The non-cash items include amortization and depreciation expense, stock-based compensation expense related to stock options and other forms of equity compensation, including, but not limited to, the sale of common stock. We do not adjust for ordinary course legal expenses resulting from maintaining and enforcing our intellectual property portfolio and license agreements. Adjusted EBITDA is not a measure calculated in accordance with GAAP. See the table below for a reconciliation of Adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with GAAP.

We have included Adjusted EBITDA in this report because it is a key measure that our management uses to understand and evaluate our core operating performance and trends, to generate future operating plans, to make strategic decisions regarding the allocation of capital and to make investments in initiatives that are focused on cultivating new markets for our solutions. We also use certain non-GAAP financial measures, including Adjusted EBITDA, as performance measures under our executive bonus plan. Further, we believe the exclusion of certain expenses in calculating Adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis and, in the case of exclusion of acquisition-related expense and certain historical legal expenses, excludes items that we do not consider to be indicative of our core operating performance. Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors.

Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under GAAP. Some of these limitations are: (a) although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements; (b) Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs; (c) Adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation; (d) Adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us; and (e) other companies, including companies in our industry, may calculate Adjusted EBITDA or similarly titled measures differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider Adjusted EBITDA alongside our other GAAP-based financial performance measures, net income and our other GAAP financial results. The following table presents a reconciliation of Adjusted EBITDA to net income, the most directly comparable GAAP measure, for each of the periods indicated (in thousands):

	Three Months Ended March 31,	
	2020	2019
Adjusted EBITDA:		
Net income	\$ 8,571	\$ 9,010
Adjustments:		
Interest expense, interest income and other income, net	94	(31)
Provision for income taxes	1,202	242
Amortization and depreciation expense	6,422	5,228
Stock-based compensation expense	6,358	4,266
Acquisition-related expense	4,056	—
Litigation expense	2,486	5,537
Total adjustments	20,618	15,242
Adjusted EBITDA	<u>\$ 29,189</u>	<u>\$ 24,252</u>

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates, as well as to a lesser extent, foreign exchange rates and inflation.

The uncertainty that exists with respect to the economic impact of the global COVID-19 pandemic has introduced significant volatility in the financial markets subsequent to the quarter ended March 31, 2020.

Interest Rate Risk

We are primarily exposed to changes in short-term interest rates with respect to our cost of borrowing under our 2017 Facility with SVB. We monitor our cost of borrowing under our various facilities, taking into account our funding requirements, and our expectation for short-term rates in the future. As of March 31, 2020 and December 31, 2019, an increase or decrease in the interest rate on our 2017 Facility with SVB by 100 basis points would increase or decrease our annual interest expense by approximately \$1.1 million and \$0.6 million, respectively.

Foreign Currency Exchange Risk

Because substantially all of our revenue and operating expenses are denominated in U.S. dollars, we do not believe that our exposure to foreign currency exchange risk is material to our business, financial condition or results of operations. If a significant portion of our revenue and operating expenses becomes denominated in currencies other than U.S. dollars, we may not be able to effectively manage this risk, and our business, financial condition and results of operations could be adversely affected by translation and by transactional foreign currency conversions.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to the company’s management, including its chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well

designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2020. Based on the evaluation of our disclosure controls and procedures as of March 31, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during our fiscal quarter ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. On October 21, 2019, we acquired 85% of the issued and outstanding capital stock of PC Open Incorporated, a Washington corporation, doing business as OpenEye. We are currently integrating OpenEye into our internal control over financial reporting and do not expect this integration to materially affect our internal control over financial reporting.

As a result of the global COVID-19 pandemic, we have taken precautionary measures intended to help protect our employees, service providers and subscribers, as well as the communities in which we participate, including enabling substantially all of our employees to work remotely. These temporary measures have not materially impacted our internal control over financial reporting during our fiscal quarter ended March 31, 2020.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

On June 2, 2015, Vivint, Inc., or Vivint, filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. We answered the complaint on July 23, 2015. Among other things, we asserted defenses based on non-infringement and invalidity of the patents in question. On August 19, 2016, the U.S. District Court, District of Utah stayed the litigation pending inter partes review by the U.S. Patent Trial and Appeal Board, or PTAB, of five of the patents in suit. In March 2017, the PTAB issued final written decisions relating to two patents finding all challenged claims unpatentable. In May 2017, the PTAB issued final written decisions relating to the remaining three patents that found certain claims unpatentable, while certain other claims were not found to be unpatentable. Vivint appealed the decisions to the U.S. Court of Appeals for the Federal Circuit, or the Federal Circuit, and we cross-appealed. In July 2018, the Federal Circuit issued orders affirming the PTAB's March 2017 decisions that invalidated all challenged claims of two patents. The U.S. District Court, District of Utah lifted the stay on the litigation on June 26, 2017, with Vivint proceeding with its case on four of the six patents in its complaint. No trial date has been set. In September 2017, the U.S. Patent and Trademark Office, or PTO, ordered ex parte reexaminations of certain claims of two of the remaining patents in suit, at our request. On October 30, 2018 and November 5, 2018, the PTO issued final office actions in the pending reexaminations rejecting all claims being examined as unpatentable over the prior art. Vivint appealed these rejections to the PTAB on March 29, 2019 and April 4, 2019. On February 28, 2020, the PTAB issued a decision affirming the rejections in one of the reexaminations. On December 20, 2018, the Federal Circuit issued an order regarding the inter partes review of three of the remaining patents in suit that vacated, reversed and remanded the PTAB's ruling with regard to the construction of a term ("communication device identification code") as requested by Alarm.com and affirmed the PTAB's May 2017 rulings invalidating certain of the Vivint patents in all other respects. On July 24, 2019, the PTAB issued further decisions with respect to two of the remaining patents in suit, finding additional claims unpatentable in view of the Federal Circuit's December 20, 2018 decision. One of the claims asserted in the litigation was found unpatentable in the July 14, 2019 decisions. Vivint appealed the July 24, 2019 decisions to the Federal Circuit on September 25, 2019. On April 16, 2020, the U.S.

District Court, District of Utah issued an order granting a temporary stay of the litigation, to expire on August 10, 2020, due to the COVID-19 pandemic and based on the stipulation of both parties.

Should Vivint prevail in proving Alarm.com infringes one or more of its patent claims, we could be required to pay damages of Vivint's lost profits and/or a reasonable royalty for sales of our solution. Since all remaining patent claims in the litigation have expired, Vivint shall not be entitled to injunctive relief as a remedy in this matter. While we believe we have valid defenses to Vivint's claims, any of these outcomes could result in a material adverse effect on our business. Even if we were to prevail, this litigation could continue to be costly and time-consuming, divert the attention of our management and key personnel from our business operations and dissuade potential customers from purchasing our solution, which would also materially harm our business. During the course of litigation, we anticipate announcements of the results of hearings and motions, and other interim developments related to the litigation. If securities analysts or investors regard these announcements as negative, the market price of our common stock may decline.

On October 22, 2019, EcoFactor, Inc., or EcoFactor, filed a complaint with the U.S. International Trade Commission, or ITC, naming Alarm.com Incorporated and Alarm.com Holdings, Inc., among others, as proposed respondents. The complaint alleges that Alarm.com's smart thermostats infringe three U.S. patents owned by EcoFactor. EcoFactor is seeking a permanent limited exclusion order and permanent cease and desist order. On November 22, 2019, the ITC instituted an investigation into EcoFactor's allegations naming Alarm.com Incorporated, Alarm.com Holdings, Inc. and others as respondents. We answered the complaint on December 19, 2019. Among other things, we asserted defenses based on non-infringement and invalidity of the patents in question. The administrative law judge presiding over the investigation has set March 15, 2021 as the target date for completion of the investigation.

On November 11, 2019, EcoFactor filed a lawsuit against us in U.S. District Court, District of Massachusetts, alleging infringement of the same three patents asserted against us in the ITC. EcoFactor is seeking permanent injunctions, enhanced damages and attorneys' fees. On December 26, 2019, the court issued an order staying the lawsuit pending the conclusion of the related ITC investigation.

On January 31, 2020, EcoFactor filed a second lawsuit against us in U.S. District Court, Western District of Texas, alleging Alarm.com's products and services infringe four additional U.S. patents owned by EcoFactor. EcoFactor is seeking permanent injunctions, enhanced damages and attorneys' fees. Our response to the complaint is due on May 27, 2020.

Should EcoFactor prevail in the ITC investigation, Alarm.com thermostats manufactured abroad could be excluded from importation into the United States. Should EcoFactor prevail in its district court lawsuits we could be required to pay damages and/or a reasonable royalty for sales of our solution, we could be enjoined from making, using and selling our solution if a license or other right to continue selling such elements is not made available to us, and we could be required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to EcoFactor's claims, the outcome of these legal claims cannot be predicted with certainty and any of these outcomes could result in an adverse effect on our business.

In addition to the matters described above, we may be required to provide indemnification to certain of our service provider partners for certain claims regarding our solutions. For example, we are incurring costs associated with the indemnification of our service provider ADT, LLC in two ongoing patent infringement suits: *Applied Capital, Inc. v. The ADT Corporation et al.* and *Varatec, LLC v. ADT, LLC*.

On July 13, 2016, Applied Capital, Inc., or Applied Capital, filed a lawsuit against ADT, LLC, the ADT Corporation, and Icontrol Networks, Inc. in U.S. District Court, the District of New Mexico. *Applied Capital, Inc v. The ADT Corporation et al.*, D. New Mexico Case No. 1-16-cv-00815. Icontrol was dismissed without prejudice on May 22, 2017. Applied Capital alleges that ADT's sales of ADT Pulse directly and indirectly infringes U.S. Patent Nos. 8,378,817 and 9,728,082, which were allegedly purchased by Applied Capital. Applied Capital is seeking damages and attorneys' fees. ADT answered Applied Capital's amended complaint on July 16, 2018. Among other things, ADT has asserted defenses based on non-infringement and invalidity of the patents-in-suit. On April 5, 2019, Applied Capital filed a lawsuit for breach of contract against Rodney Fox, the inventor of the patents-in-suit, in the Second Judicial District Court, County of Bernalillo in New Mexico State Court (No. D-202-CV-2019-02841). Mr. Fox counterclaimed, alleging that he is the rightful owner of the patents-in-suit. Based on the dispute of ownership, on October 15, 2019, ADT filed a motion to stay in this matter pending its resolution. Applied Capital and Mr. Fox reached settlement and stipulated to dismissal of the New Mexico State Court action on October 31, 2019. The court issued its claim construction order on August 12, 2019, fact discovery closed on November 12, 2019, expert discovery closed on March 9, 2020, and the parties filed opening summary judgment and Daubert motions on April 20, 2020. Applied Capital filed its Second Amended Complaint on January 27, 2020 and ADT answered, adding a claim of inequitable conduct, on February 10, 2020. The pretrial conference is scheduled for September 30, 2020, and trial is set for October 19, 2020.

On March 4, 2019, Varatec, LLC, or Varatec, sued ADT, LLC d/b/a ADT Security Services in U.S. District Court for the Northern District of Illinois. *Varatec, LLC v. ADT, LLC d/b/a ADT Security Services*, N.D. Illinois Case No. 1-19-cv-01543. Varatec alleges that ADT's sales of ADT Pulse directly and indirectly infringe U.S. Patent No. 7,792,256, which was assigned to Varatec. Varatec seeks a permanent injunction, enhanced damages, and attorneys' fees. On May 23, 2019, ADT filed a motion seeking to dismiss the complaint for failure to state a claim, on the basis that the asserted patent fails to claim patent eligible

subject matter. On July 3, 2019, third-party Unified Patents Inc. filed a petition seeking inter parties review of the asserted patent by the PTAB. After the completion of briefing of ADT's motion to dismiss, the parties agreed to stay the case pending resolution of the inter partes review, and the court granted the parties' motion on August 14, 2019. Unified Patent's petition for inter parties review was instituted on December 31, 2019 and is currently pending. Varatec filed a notice of voluntary dismissal without prejudice under Fed. R. Civ. P. 41(a) on April 15, 2020, and the court has ratified the dismissal.

Should the plaintiffs prevail on the claims that one or more elements of ADT's products infringe, we could be required to indemnify ADT for damages in the form of a reasonable royalty or ADT could be enjoined from making, using and selling our solution if a license or other right to continue selling our technology is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. The outcome of these legal claims cannot be predicted with certainty.

We may also be a party to litigation and subject to claims incident to the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of these ordinary course matters will not have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

ITEM 1A. RISK FACTORS

Our business is subject to numerous risks. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Quarterly Report on Form 10-Q as well as our other public filings with the Securities and Exchange Commission, or SEC. Any of the following risks could have a material adverse effect on our business, financial condition, results of operations and prospects and cause the trading price of our common stock to decline.

Risks Related to Our Business and Industry

Our business and results of operations may be negatively affected by the COVID-19 pandemic.

In December 2019, a novel strain of coronavirus disease, or COVID-19, was reported in China and has since become a global pandemic. Governments, public institutions and other organizations in many countries and localities where COVID-19 has been detected are taking certain emergency measures to combat its spread, including imposing lockdowns, shelter-in-place orders, quarantines, restrictions on travel and gatherings and the extended shutdown of non-essential businesses that cannot be conducted remotely. While the potential economic impact brought by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, it has and may continue to disrupt our hardware supply chain as well as cause disruptions to and restrictions on our service providers' ability to travel and to meet with residential and commercial property owners who use our solutions, cancellations or postponement of certain events, or temporary closures of our facilities or the facilities of our service providers or suppliers. The COVID-19 pandemic has also resulted in significant disruption of global financial markets, which may reduce our ability to access capital and which could negatively affect our liquidity in the future. This economic and financial uncertainty may also negatively impact pricing for our platform or cause customers to reduce or postpone purchasing our solutions, which may, in turn, negatively affect our revenue, cash flows, results of operations and financial condition. The increased uncertainty and disruption to global markets may also negatively impact our growth opportunities whether organically or through acquisitions. Because our service provider partners have indicated that they typically have three to five-year service contracts with residential and commercial property owners who use our solutions, any such adverse effects may not be fully reflected in our results of operation until future periods.

The uncertainty caused by and the unprecedented nature of the current COVID-19 pandemic make the potential impact of the pandemic difficult to predict and the extent to which it may negatively affect our industry, our supply of hardware products, our business operations or our operating results is uncertain. Weak global economic conditions, whether or not directly as a result of the pandemic, also may exacerbate the impact of the pandemic. Further, we do not yet know the full effects of the COVID-19 pandemic on our suppliers and service providers. However, we do anticipate that for the remainder of 2020 our hardware revenue will be lower in future periods as compared to the first quarter of 2020. We also anticipate that our SaaS and license revenue growth rate may be lower in future periods due to the COVID-19 pandemic as some consumers or small businesses defer or cancel previously anticipated purchases.

The ultimate impact to our results will depend to a large extent on future developments and new information that may emerge regarding the duration and severity of the COVID-19 pandemic and the actions taken by authorities and other entities to contain COVID-19 or treat its impact, all of which are beyond our control. These potential impacts, while uncertain, could harm our business and adversely affect our operating results.

In addition, to the extent the ongoing COVID-19 pandemic adversely affects our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described in this "Risk Factors" section which may materially and adversely affect our business and results of operations.

Our actual operating results may differ significantly from any guidance provided.

Our guidance, including forward-looking statements, is prepared by management and is qualified by, and subject to, 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 these uncertainties and contingencies are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to represent that actual results could not fall outside of the suggested ranges.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. In particular, guidance relating to the anticipated results of operations of an acquired business is inherently more speculative in nature than other guidance as management will, necessarily, be less familiar with the business, procedures and operations of the acquired business. Similarly, guidance offered in periods of extreme uncertainty, such as the uncertainty caused by the COVID-19 pandemic and the evolving responses to the resulting public health crisis, is inherently more speculative in nature than guidance offered in periods of relative stability. Accordingly, any guidance with respect to our projected financial performance is necessarily only an estimate of what management believes is realizable as of the date the guidance is given. Actual results will vary from the guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data will diminish the farther in the future that the data is forecasted.

Actual operating results may be different from our guidance, and such differences may be adverse and material. In light of the foregoing, investors are urged to put the guidance in context and not to place undue reliance on it. In addition, the market price of our common stock may reflect various market assumptions as to the accuracy of our guidance. If our actual results of operations fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially.

We have taken certain precautions due to the COVID-19 pandemic that could harm our business.

In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19 and shelter-in-place orders in many of the locations we have offices or other facilities, we have taken temporary precautionary measures intended to help minimize the risk of COVID-19 to our employees, service providers and subscribers, as well as the communities in which we participate. These precautionary measures could negatively impact our business. In particular, we have enabled substantially all of our employees to work remotely in compliance with relevant government advice, have suspended all non-essential travel for our employees, are canceling or postponing company-sponsored events, employee attendance at industry events and in-person work-related meetings. Although we continue to monitor the situation and may adjust our current policies as more information and guidance become available, temporarily suspending travel and shifting non-essential function employees to work-from-home could negatively impact our marketing efforts, slow down our recruiting efforts, or create operational or other challenges, including decreased productivity, any of which could harm our business. Though we are taking these precautionary measures as well as preparing our systems for the likelihood of increased cybersecurity threats, there is no guarantee that our precautions will fully protect our employees or enable us to maintain our productivity. The extent to which COVID-19 and our precautionary measures related thereto may impact our business will depend on future developments, which are highly uncertain and cannot be predicted at this time.

Our quarterly results of operations have fluctuated and are likely to continue to fluctuate. As a result, we may fail to meet or exceed the expectations of investors or securities analysts, which could cause our stock price to decline.

Our quarterly operating results, including the levels of our revenue, gross margin, cash flow and deferred revenue, may fluctuate as a result of a variety of factors, including adverse macroeconomic conditions, the product mix that we sell, the relative sales related to our platforms and solutions and other factors which are outside of our control. If our quarterly revenue or results of operations fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Fluctuations in our results of operations may be due to a number of factors, including:

- the portion of our revenue attributable to software as a service, or SaaS, and license versus hardware and other sales;
- our ability to manage the businesses we have acquired, and to integrate and manage any future acquisitions of businesses;
- fluctuations in demand, including due to seasonality or broader economic factors, for our platforms and solutions;
- changes in pricing by us in response to competitive pricing actions;
- our ability to increase, retain and incentivize the service provider partners that market, sell, install and support our platforms and solutions;

- the ability of our hardware vendors to continue to manufacture high-quality products and to supply sufficient products to meet our demands;
- the timing and success of introductions of new solutions, products or upgrades by us or our competitors and the entrance of new competitors;
- changes in our business and pricing policies or those of our competitors;
- the ability to accurately forecast revenue as we generally rely upon our service provider partner network to generate new revenue;
- our ability to control costs, including our operating expenses and the costs of the hardware we purchase;
- changes in U.S. trade policies, including new or potential tariffs or penalties on imported products;
- competition, including entry into the industry by new competitors and new offerings by existing competitors;
- issues related to introductions of new or improved products such as shortages of prior generation products or short-term decreased demand for next generation products;
- perceived or actual problems with the security, privacy, integrity, reliability, quality or compatibility of our solutions, including those related to security breaches in our systems, our subscribers' systems, unscheduled downtime, or outages;
- the amount and timing of expenditures, including those related to expanding our operations, including through acquisitions, increasing research and development, introducing new solutions or paying litigation expenses;
- the ability to effectively manage growth within existing and new markets domestically and abroad;
- changes in the payment terms for our platforms and solutions;
- collectibility of receivables due from service provider partners and other third parties;
- the strength of regional, national and global economies; and
- the impact of natural disasters such as earthquakes, hurricanes, fires, power outages, floods, epidemics, pandemics, including COVID-19, and other catastrophic events or man-made problems such as terrorism or global or regional economic, political and social conditions.

Fluctuations in our quarterly operating results may be particularly pronounced in the current economic environment due to the uncertainty caused by and the unprecedented nature of the current COVID-19 pandemic. Due to the foregoing factors and the other risks discussed in this Quarterly Report on Form 10-Q, you should not rely on quarter-to-quarter comparisons of our results of operations as an indication of our future performance. You should not consider our recent revenue and Adjusted EBITDA growth or results of one quarter as indicative of our future performance. See the *Non-GAAP Measures* section of Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations," for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income, the most comparable GAAP measurement, for the three months ended March 31, 2020 and 2019.

Downturns in general economic and market conditions and reductions in spending may reduce demand for our platforms and solutions, which could harm our revenue, results of operations and cash flows.

Our revenue, results of operations and cash flows depend on the overall demand for our platforms and solutions. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from the COVID-19 pandemic, changes in gross domestic product growth, financial and credit market fluctuations, energy costs, international trade relations and other geopolitical issues, the availability and cost of credit and the global housing and mortgage markets could cause a decrease in consumer discretionary spending and business investment and diminish growth expectations in the U.S. economy and abroad.

During weak economic times, the available pool of service providers may decline as the prospects for home building and home renovation projects diminish, which may have a corresponding impact on our growth prospects. In addition, there is an increased risk during these periods that an increased percentage of our service provider partners will file for bankruptcy protection, which may harm our reputation, revenue, profitability and results of operations. In addition, we may determine that the cost of pursuing any claim may outweigh the recovery potential of such claim. Likewise, consumer bankruptcies can detrimentally affect the business stability of our service provider partners.

The current COVID-19 pandemic has caused significant uncertainty and volatility in global markets, which has and may continue to cause consumer discretionary spending to decline for an unknown a lengthy period of time. A prolonged economic slowdown and a material reduction in new home construction and renovation projects may result in diminished sales of our platforms and solutions. Further worsening, broadening or protracted extension of the economic downturn could have a negative impact on our business, revenue, results of operations and cash flows.

We sell security and life safety solutions and if our solutions fail for any reason, we could be subject to liability and our business could suffer.

We sell security and life safety solutions, which are designed to secure the safety of our subscribers and their residences or commercial properties. If these solutions fail for any reason, including due to defects in our software, a carrier outage, a failure of our network operations centers, a failure on the part of one of our service provider partners or user error, we could be subject to liability for such failures and our business could suffer.

Our platforms and solutions may contain undetected defects in the software, infrastructure, third-party components or processes. In addition, due to the COVID-19 pandemic, we have enabled substantially all of our employees to work remotely which may make us more vulnerable to cyber-attacks and may create operational or other challenges, any of which could harm our systems or our business. Although we have taken precautionary measures to prepare for these threats and challenges, there is no guarantee that our precautions will fully protect our systems. We continue to monitor the situation and may adjust our current policies as more information and guidance become available. If our platforms or solutions suffer from defects, we could experience harm to our branded reputation, claims by our subscribers or service provider partners or lost revenue during the period required to address the cause of the defects. We may find defects in new, acquired or upgraded solutions, resulting in loss of, or delay in, market acceptance of our platforms and solutions, which could harm our business, financial condition, cash flows or results of operations.

Since solutions that enable our platforms are installed by our service provider partners, if they do not install or maintain such solutions correctly, our platforms and solutions may not function properly. If the improper installation or maintenance of our platforms and solutions leads to service or equipment failures after introduction of, or an upgrade to, our platforms or a solution, we could experience harm to our branded reputation, claims by our subscribers or service provider partners or lost revenue during the period required to address the cause of the problem. Further, we rely on our service provider partners to provide the primary source of support and ongoing service to our subscribers and, if our service provider partners fail to provide an adequate level of support and services to our subscribers, it could have a material adverse effect on our reputation, business, financial condition, cash flows or results of operations.

Any defect in, or disruption to, our platforms and solutions could cause consumers not to purchase additional solutions from us, prevent potential consumers from purchasing our platforms and solutions or harm our reputation. Although our contracts with our service provider partners limit our liability to our service provider partners for these defects, disruptions or errors, we nonetheless could be subject to litigation for actual or alleged losses to our service provider partners or our subscribers, which may require us to spend significant time and money in litigation or arbitration, or to pay significant settlements or damages. Defending a lawsuit, regardless of its merit, could be costly, divert management's attention and affect our ability to obtain or maintain liability insurance on acceptable terms and could harm our business. Although we currently maintain some warranty reserves, we cannot assure you that these warranty reserves will be sufficient to cover future liabilities.

Our business is subject to the risks of earthquakes, hurricanes, fires, power outages, floods, pandemics, natural disasters and other catastrophic events, and to interruption by man-made problems such as terrorism or global or regional economic, political and social conditions.

A significant natural disaster, such as an earthquake, hurricane, fire, flood, or a public health pandemic, such as COVID-19, or a significant power outage could harm our business, financial condition, cash flows and results of operations. Natural disasters could affect our hardware vendors, our wireless carriers or our network operations centers. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenue, such as metropolitan areas in North America, consumers in that region may delay or forego purchases of our platforms and solutions from service providers in the region, which may harm our results of operations for a particular period. In addition, terrorist acts or acts of war could cause disruptions in our business or the business of our hardware vendors, service providers, subscribers or the economy as a whole. More generally, these geopolitical, social and economic conditions could result in increased volatility in worldwide financial markets and economies that could harm our sales. Given our concentration of sales during the second and third quarters, any disruption in the business of our hardware vendors, service provider partners or subscribers that impacts sales during the second or third quarter of each year could have a greater impact on our annual results. All of the aforementioned risks may be augmented if the disaster recovery plans for us, our service provider partners and our suppliers prove to be inadequate. To the extent that any of the above results in delays or cancellations of orders, or delays in the manufacture, deployment or shipment of our platforms and solutions, our business, financial condition, cash flows and results of operations would be harmed.

We may not sustain our growth rate and we may not be able to manage any future growth effectively.

We have experienced significant growth and also have substantially expanded our operations in a short period of time. Our revenue increased from \$261.1 million in 2016 to \$502.4 million in 2019 and increased from \$112.3 million for the three months ended March 31, 2019 to \$151.9 million for the three months ended March 31, 2020. We do not expect to achieve similar growth rates in future periods. You should not rely on our operating results for any prior quarterly or annual periods as an indication of our future operating performance. If we are unable to maintain expected revenue growth in both absolute dollars and as a percentage of prior period revenue, our financial results could suffer and our stock price could decline.

Our future operating results depend, to a large extent, on our ability to successfully manage any future expansion and growth. To successfully manage our growth and obligations as a public company, we believe we must effectively, among other things:

- maintain our relationships with existing service provider partners and add new service provider partners;
- increase our subscriber base and help our service provider partners maintain and improve their revenue retention rates, while also expanding their cross-sell effectiveness;
- manage our relationships with our hardware vendors and other key suppliers;
- add, train and integrate sales and marketing personnel;
- expand our international operations; and
- continue to implement and improve our administrative, financial and operational systems, procedures and controls.

We intend to continue to invest in research and development, sales and marketing, and general and administrative functions and other areas to grow our business. We are likely to recognize the costs associated with these increased investments earlier than some of the anticipated benefits and the return on these investments may be lower, or may develop more slowly, than we expect, which could adversely affect our operating results.

If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities or develop new solutions or enhancements to our existing solutions and we may fail to satisfy subscriber and service provider partner requirements, maintain the quality of our solutions, execute on our business plan or respond to competitive pressures, which could result in our financial results suffering and a decline in our stock price.

We have expanded our business rapidly in recent periods. If we fail to manage the expansion of our operations and infrastructure effectively, we may be unable to execute our business plan, maintain high levels of service or address competitive challenges adequately.

We increased our number of full-time employees from 607 as of December 31, 2016 to 1,227 as of March 31, 2020. Our growth has placed, and may continue to place, a significant strain on our managerial, administrative, operational, financial and other resources. We intend to further expand our overall business, service provider partner network, subscriber base, headcount and operations, including by acquiring other businesses. Creating and maintaining a global organization and managing a geographically dispersed workforce requires substantial management effort and significant additional investment in our infrastructure. We will be required to continue to improve our operational, financial and management controls and our reporting procedures to ensure timely and accurate reporting of our operational and financial results and we may not be able to do so effectively. As such, we may be unable to manage our expenses effectively in the future, which may negatively impact our gross profit or operating expenses in any particular quarter. If we fail to manage our anticipated growth and change in a manner that preserves the key aspects of our corporate culture, the quality of our solutions may suffer, which could negatively affect our brand and reputation and harm our ability to retain and attract service provider partners and consumers.

From time to time, we are involved in legal proceedings where a negative outcome, including an adverse litigation judgment or settlement, could expose us to monetary damages or limit our ability to operate our business, resulting in a material adverse effect on our business, financial condition, cash flows and results of operations.

We are involved and have been involved in the past in legal proceedings from time to time. For example, on June 2, 2015, Vivint filed a lawsuit against us alleging that our technology directly and indirectly infringes six patents purchased by Vivint. On October 22, 2019, EcoFactor, Inc., or EcoFactor, filed a complaint with the U.S. International Trade Commission, or ITC, alleging that Alarm.com's smart thermostats infringe three U.S. patents owned by EcoFactor. On November 11, 2019, EcoFactor filed a lawsuit against us in U.S. District Court, District of Massachusetts, alleging infringement of the same three patents asserted against us in the ITC. On January 31, 2020, EcoFactor filed a lawsuit against us in the U.S. District Court, Western District of Texas, alleging Alarm.com's products and services infringe four additional U.S. patents owned by EcoFactor. EcoFactor is seeking permanent injunctions, enhanced damages and attorney's fees. See the section of this Quarterly Report titled "Legal Proceedings" for additional information regarding each of these matters. We may not be able to accurately assess the risks related to any of these suits, and we may be unable to accurately assess our level of exposure as the results of any litigation, investigations and other legal proceedings are inherently unpredictable and expensive. Any claims against us, whether meritorious or not, could be time consuming, result in costly litigation, damage our reputation, require significant amounts of management time and divert significant resource. Companies in our industry have been subject to claims related to patent infringement, regulatory matters, and product liability, as well as contract and employment-related claims. As a result of patent infringement and other intellectual property proceedings, we have, and may be required to seek in the future, licenses under patents or intellectual property rights owned by third parties, including open-source software and other commercially available software, which can be costly, or cross-license agreements relating to our and third-party intellectual property. The outcome of legal claims and proceedings against us cannot be predicted with certainty, and a negative outcome could result in a material adverse effect on our business, financial condition, cash flows and results of operations.

Our business operates in a regulated industry.

Our business, operations and service provider partners are subject to various U.S. federal, state and local consumer protection laws, licensing regulation and other laws and regulations, and to similar laws and regulations in the other countries in which we operate. Our advertising and sales practices and that of our U.S. service provider partner network are subject to regulation by the U.S. Federal Trade Commission, or the FTC, in addition to state consumer protection laws. The FTC and the Federal Communications Commission have issued regulations that place restrictions on, among other things, unsolicited automated telephone calls to residential and wireless telephone subscribers by means of automatic telephone dialing systems and the use of prerecorded or artificial voice messages. If our service provider partners were to take actions in violation of these regulations, such as telemarketing to individuals on the "Do Not Call" registry or using automatic telephone dialing systems and prerecorded or artificial voice messages, we could be subject to fines, penalties, private actions or enforcement actions by government regulators. Although we have taken steps to insulate ourselves from any such wrongful conduct by our service provider partners, and to contractually require our service provider partners to comply with these laws and regulations, no assurance can be given that we will not be exposed to liability as result of our service provider partners' conduct. Further, to the extent that any changes in law or regulation further restrict the lead generation activity of our service provider partners, these restrictions could result in a material reduction in subscriber acquisition opportunities, reducing the growth prospects of our business and adversely affecting our financial condition and future cash flows. In addition, most states in which we operate have licensing laws directed specifically toward the monitored security services industry. Our business relies heavily upon cellular telephone service to communicate signals. Cellular telephone companies are currently regulated by both federal and state governments. State-level privacy and data security laws in California and various other U.S. states regulate our, and our service provider partners', use, collection, and disclosure of subscribers' personal information. A number of proposed privacy bills in other U.S. states could place restrictions on how we and our service provider partners use personal information and market to consumers in those states. Changes in laws or regulations could require us to change the way we operate, which could increase costs or otherwise disrupt operations. In addition, failure to comply with any such applicable laws or regulations could result in substantial fines or revocation of our operating permits and licenses, including in geographic areas where our services have substantial penetration, which could adversely affect our business, financial condition, cash flows and results of operations. Further, if these laws and regulations were to change or if we fail to comply with such laws and regulations as they exist today or in the future, our business, financial condition, cash flows and results of operations could be materially and adversely affected.

The markets in which we participate are highly competitive and many companies, including large technology companies, broadband and security service providers and other managed service providers, are actively targeting the home automation, security monitoring, video monitoring and energy management markets. If we are unable to compete effectively with these companies, our sales and profitability could be adversely affected.

We compete in several markets, including security, video, automation, energy management and wellness solutions. The markets in which we participate are highly competitive and competition may intensify in the future.

Our ability to compete depends on a number of factors, including:

- our platforms and solutions' functionality, performance, ease of use and installation, reliability, availability and cost effectiveness relative to that of our competitors' products;

- our success in utilizing new and proprietary technologies to offer solutions and features previously not available in the marketplace;
- our success in identifying new markets, applications and technologies;
- our ability to attract and retain service provider partners;
- our name recognition and reputation;
- our ability to recruit software engineers and sales and marketing personnel; and
- our ability to protect our intellectual property.

Consumers may prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. In the event a consumer decides to evaluate a new home automation, security monitoring, video monitoring, energy management, or wellness solution, the consumer may be more inclined to select one of our competitors whose product offerings are broader than those that we offer. In addition, while the COVID-19 pandemic continues, consumers may prefer to purchase products that they can install themselves. If there are continuing restrictions on our service providers' ability to meet with residential and commercial property owners in person, our ability to compete will depend on our ability to make our products available for remote installation or to make certain of our products easily installable by consumers rather than solely by our service providers.

Our current competitors include providers of other technology platforms for the connected property with interactive security, including Alula (formed following the merger of ipDatatel, LLC and Resolution Products, LLC), Avigilon Corporation, Brivo Inc., Digital Monitoring Products Inc., Eagle Eye Networks Inc., Honeywell International Inc., Resideo Technologies Inc., Telular Corporation (acquired by AMETEK, Inc.), SecureNet Technologies, LLC, United Technologies Corporation, and Verkada Inc., which sell solutions to service providers, cable operators, technology retailers and other residential and commercial automation providers. We also compete with interactive, monitored security solutions sold directly to subscribers by firms like Scout and SimpliSafe. In addition, our service provider partners compete with security solutions sold directly to subscribers, as well as managed service providers, such as cable television, telephone and broadband companies like AT&T Inc., Charter Communications, Inc. and Comcast, and providers of point products, including Google Inc.'s Nest Labs, Inc. which offers the Nest Secure security system as well as a smart thermostat, the Nest Protect smart smoke detector and video cameras. Amazon.com offers Amazon Home Services security packages with bundled equipment and professional installation, and Amazon Key, a security camera and smart lock integration feature. Ring Inc., owned by Amazon.com, offers a connected video doorbell, video cameras and an integrated security system, Ring Alarm. Samsung's SmartThings offers a security system and a home automation and awareness hub. Arlo Technologies, Inc. offers connected video cameras, a connected video doorbell, and smart security devices. Apple Inc. offers a feature that allows some manufacturers' connected devices and accessories to be controlled through its HomeKit service available in Apple's iOS operating system. Additionally, Canary and other companies offer all in one video monitoring and awareness devices. In addition, we may compete with other large technology companies that offer control capabilities among their products, applications and services, and have ongoing development efforts to address the broader connected home market.

Many of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing, distribution and other resources than we have. We expect to encounter new competitors as we enter new markets as well as increased competition, both domestically and internationally, from other established and emerging home automation, security monitoring, video monitoring and automation, wellness, and energy management companies as well as large technology companies. In addition, there may be new technologies that are introduced that reduce demand for our solutions or make them obsolete. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties and rapidly acquire significant market share. Increased competition could also result in price reductions and loss of market share, any of which could result in lower revenue and negatively affect our ability to grow our business.

Aggressive business tactics by our competitors may reduce our revenue.

Increased competition in the markets in which we compete may result in aggressive business tactics by our competitors, including:

- selling at a discount;
- offering products similar to our platforms and solutions on a bundled basis at no charge;
- announcing competing products combined with extensive marketing efforts;
- providing financing incentives to consumers; and

- asserting intellectual property rights irrespective of the validity of the claims.

Our service provider partners may switch and offer the products and services of competing companies, which would adversely affect our sales and profitability. Competition from other companies may also adversely affect our negotiations with service provider partners and suppliers, including, in some cases, requiring us to lower our prices. Opportunities to take market share using innovative products, services and sales approaches may also attract new entrants to the field. We may not be able to compete successfully with the offerings and sales tactics of other companies, which could result in the loss of service provider partners offering our platforms and solutions and, as a result, our revenue and profitability could be adversely affected.

If we fail to compete successfully against our current and future competitors, or if our current or future competitors employ aggressive business tactics, including those described above, demand for our platforms and solutions could decline, we could experience cancellations of our services to consumers, or we could be required to reduce our prices or increase our expenses.

The proper and efficient functioning of our network operations centers and data back-up systems is central to our solutions.

Our solutions operate with a hosted architecture and we update our solutions regularly while our solutions are operating. If our solutions and/or upgrades fail to operate properly, our solutions could stop functioning for a period of time, which could put our users at risk. Our ability to keep our business operating is highly dependent on the proper and efficient operation of our network operations centers and data back-up systems. Although our network operations centers have back-up computer and power systems, if there is a catastrophic event, natural disaster, terrorist attack, security breach or other extraordinary event, we may be unable to provide our subscribers with uninterrupted monitoring service or may be unable to adequately protect confidential information and data from unauthorized access or loss. Furthermore, because data back-up systems are susceptible to malfunctions and interruptions (including those due to equipment damage, power outages, human error, computer viruses, computer hacking, data corruption and a range of other hardware, software and network problems), we cannot guarantee that we will not experience data back-up failures in the future. A significant or large-scale security breach, malfunction or interruption of our network operations centers or data back-up systems could adversely affect our ability to keep our operations running efficiently or could result in unauthorized access to or loss of data. If such an event results in unauthorized access to or loss of service provider partner, subscriber, employee or other personally identifiable data subject to data privacy and security laws and regulations, then it could result in substantial fines by U.S. federal and state authorities, foreign data privacy authorities in the European Union, or the EU, Canada, and other countries, and/or private claims by companies or individuals. If a malfunction or security breach results in a wider or sustained disruption, it could have a material adverse effect on our reputation, business, financial condition, cash flows or results of operations.

Failure to maintain the security of our information and technology networks, including information relating to our service provider partners, subscribers and employees, could adversely affect us.

We are dependent on information technology networks and systems, including the Internet, to process, transmit and store electronic information and, in the normal course of our business, we collect and retain certain information pertaining to our service provider partners, subscribers and employees, including credit card information for many of our service provider partners and certain of our subscribers. If security breaches in connection with the delivery of our solutions allow unauthorized third parties to access any of this data or obtain control of our subscribers' systems, our reputation, business, financial condition, cash flows and results of operations could be harmed.

The legal, regulatory and contractual environment surrounding information security, privacy and credit card fraud is constantly evolving and companies that collect and retain such information are under increasing attack by cyber-criminals around the world. Further, as the regulatory focus on privacy issues continues to increase and worldwide laws and regulations concerning the protection of data and personal information expand and become more complex, these potential risks to our business will intensify. A significant actual or potential theft, loss, fraudulent use or misuse of service provider partner, subscriber, employee or other personally identifiable data, whether by third parties or as a result of employee malfeasance or otherwise, non-compliance with our contractual or other legal obligations regarding such data or a violation of our privacy and security policies with respect to such data could result in loss of confidential information, damage to our reputation, early termination of our service provider partner contracts, litigation, regulatory investigations or actions and other liabilities or actions against us, including significant fines by U.S. federal and state authorities, foreign data privacy authorities in the EU, Canada, and other countries and private claims by companies and individuals for violation of data privacy and security regulations. To the extent that any such exposure leads to credit card fraud or identity theft, we may experience a general decline in consumer confidence in our business, which may lead to an increase in attrition rates or may make it more difficult to attract new subscribers. If any one of these risks materializes our business, financial condition, cash flows or results of operations could be materially and adversely affected.

If our security measures are breached, including any breaches caused by cyber-attacks, our reputation may be damaged, we may be exposed to significant liabilities under U.S. and foreign laws, and our business and results of operations may be adversely affected.

Cyber-attacks from computer hackers and cyber criminals and other malicious Internet-based activity continue to increase generally, and perpetrators of cyber-attacks may be able to develop and deploy viruses, worms, ransomware, malware, DNS attacks, wireless network attacks, attacks on our cloud networks, phishing attempts, social engineering attempts, distributed denial of service attacks and other advanced persistent threats or malicious software programs that attack our products and services, our networks and network endpoints or otherwise exploit any security vulnerabilities of our products, services and networks. Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate these techniques or to implement adequate preventative measures. We cannot be certain that advances in cyber-capabilities or other developments will not compromise or breach the technology protecting the networks that access our platforms and solutions, and we can make no assurance that we will be able to detect, prevent, timely and adequately address or mitigate the negative effects of cyber-attacks or other security breaches. In addition, due to the COVID-19 pandemic, we have enabled substantially all of our employees to work remotely which may make us more vulnerable to cyber-attacks or other security breaches.

Security breaches of, or sustained attacks against, our networks and infrastructure could create system disruptions and shutdowns that could result in disruptions to our operations or unauthorized access to or loss of our data. If such an event results in unauthorized access to or loss of any data subject to data privacy and security laws and regulations, then we could be subject to substantial fines by U.S. federal and state authorities, foreign data privacy authorities in the EU, Canada, and other countries, and private claims by companies or individuals. A system disruption, shutdown, or loss of data may result in adverse publicity and therefore adversely affect the market's perception of the security and reliability of our services. A cyber-attack may cause additional costs, such as investigative and remediation costs, and the costs of providing individuals and/or data owners with notice of the breach, legal fees and the costs of any additional fraud detection activities required by law, a court or a third-party. Additionally, some of our customer contracts require us to indemnify customers from damages they may incur as a result of a breach of our networks and systems. There can be no assurance that the limitation of liability provisions in our contracts for a security breach would be enforceable or would otherwise protect us from any such liabilities or damages with respect to any particular claim. While we maintain general liability insurance coverage and coverage for technology errors or omissions, we cannot assure you that such coverage will be available in sufficient amounts to cover one or more large claims related to a breach, will continue to be available on acceptable terms or at all. If any one of these risks materializes, our business, financial condition, cash flows or results of operations could be materially and adversely affected.

We rely on our service provider partner network to acquire additional subscribers, and the inability of our service provider partners to attract additional subscribers or retain their current subscribers could adversely affect our operating results.

Substantially all of our revenue is generated through the sales of our platforms and solutions by our service provider partners, who incorporate our solutions in certain of the products and packages they sell to their customers, and our service provider partners are responsible for subscriber acquisition, as well as providing customer service and technical support for our platforms and solutions to the subscribers. We provide our service provider partners with specific training and programs to assist them in selling and providing support for our platforms and solutions, but we cannot assure that these steps will be effective. In addition, we rely on our service provider partners to sell our platforms and solutions into new markets in the intelligent and connected property space. If our service provider partners are unsuccessful in marketing, selling and supporting our platforms and solutions, our operating results could be adversely affected.

In order for us to maintain our current revenue sources and grow our revenues, we must effectively manage and grow relationships with our service provider partners. Recruiting and retaining qualified service provider partners and training them in our technology and solutions requires significant time and resources and has been made more challenging by the shelter-in-place orders and travel restrictions implemented in many locations to combat the COVID-19 pandemic. If we fail to maintain existing service provider partners or develop relationships with new service provider partners, our revenue and operating results would be adversely affected. In addition, to execute on our strategy to expand our sales internationally, we must develop, manage and grow relationships with service provider partners that sell into these markets.

Any of our service provider partners may choose to offer a product from one of our competitors instead of our platforms and solutions, elect to develop their own competing solutions or simply discontinue their operations with us. For example, we entered into a license agreement in November 2013 with Vivint Inc., or Vivint, pursuant to which we granted a license to use the intellectual property associated with our connected home solutions. Under the terms of this arrangement, Vivint has transitioned from selling our solutions directly to its customers to selling its own home automation product to its new customers. We now generate revenue from a monthly fee charged to Vivint on a per customer basis from sales of this service provider partner's product; however, these monthly fees are less on a per customer basis than fees we receive from our SaaS solutions. Therefore, we receive less revenue on a per customer basis from Vivint compared to our SaaS subscriber base, which may result in a lower revenue growth rate. We must also work to expand our network of service provider partners to ensure that we have sufficient geographic coverage and technical expertise to address new markets and technologies. While it is difficult to estimate the total number of available service provider partners in our markets, there are a finite number of service provider partners that are able

to perform the types of technical installations required for our platforms and solutions. In the event that we saturate the available service provider pool, or if market or other forces cause the available pool of service providers to decline, it may be increasingly difficult to grow our business. If we are unable to expand our network of service provider partners, our business could be harmed.

As consumers' product and service options grow, it is important that we enhance our service provider partner footprint by broadening the expertise of our service provider partners, working with larger and more sophisticated service provider partners and expanding the mainstream solutions our service provider partners offer. If we do not succeed in this effort, our current and potential future service provider partners may be unable or unwilling to broaden their offerings to include our connected property solutions, resulting in harm to our business.

We receive a substantial portion of our revenue from a limited number of service provider partners, and the loss of, or a significant reduction in, orders from one or more of our major service provider partners would result in decreased revenue and profitability.

Our success is highly dependent upon establishing and maintaining successful relationships with a variety of service provider partners. We market and sell our platforms and solutions through a channel assisted sales model and we derive substantially all of our revenue from these service provider partners. We generally enter into agreements with our service provider partners outlining the terms of our relationship, including service provider pricing commitments, installation, maintenance and support requirements, and our sales registration process for registering potential sales to subscribers. These service provider contracts typically have an initial term of one year, with subsequent renewal terms of one year, and are terminable at the end of the initial term or renewal terms without cause upon written notice to the other party. In some cases, these contracts provide the service provider partner with the right to terminate prior to the expiration of the term without cause upon 30 days written notice, or, in the case of certain termination events, the right to terminate the contract immediately. While we have developed a network of over 9,000 service provider partners to sell, install and support our platforms and solutions, we receive a substantial portion of our revenue from a limited number of channel partners and significant customers. During the years ended December 31, 2019, 2018 and 2017, our 10 largest revenue service provider partners accounted for 52%, 57% and 60% of our revenue. ADT LLC represented greater than 15% but not more than 20% of our revenue in 2017, 2018 and 2019. ADT LLC also represented more than 10% of accounts receivable as of December 31, 2019.

Brinks Home Security, along with certain of its domestic subsidiaries, filed voluntary petitions for relief, as well as a joint partial prepackaged plan of reorganization, or the Plan, with the United States Bankruptcy Court for the Southern District of Texas as of June 30, 2019. We were listed as an unsecured creditor with an unimpaired trade claim in the Plan. On September 3, 2019, Brinks Home Security disclosed it had emerged from the bankruptcy proceedings after completing a reorganization and obtaining new debt financing. We expect to continue to receive payments in the ordinary course of business; however, if Brinks Home Security is unable to meet its payment obligations to us, our revenue and profitability may be adversely affected.

We anticipate that we will continue to be dependent upon a limited number of service provider partners for a significant portion of our revenue for the foreseeable future and, in some cases, a portion of our revenue attributable to individual service provider partners may increase in the future. The loss of one or more key service provider partners, a reduction in sales through any major service provider partners or the inability or unwillingness of any of our major service provider partners to pay for our platforms and solutions would reduce our revenue and could impair our profitability.

Substantially all of the revenues associated with the non-hosted software platform are from a single customer and the loss of this customer could harm our operating results.

In March 2017, we acquired certain assets related to the Connect business unit of Icontrol Networks, Inc., or Icontrol, and all of the outstanding equity interests of the two subsidiaries through which Icontrol conducted its Piper business, which we refer to in this report as the Acquisition. Historically, ADT LLC, or ADT, has accounted for substantially all of the revenue of the Connect business unit. In connection with the Acquisition we amended our master service agreement with ADT to cover services provided with respect to the non-hosted software platform, or Software platform, and recently further amended the master service agreement; however, we cannot assure you that we will be able to meet the conditions set forth in the amended agreement or that ADT will use the Software platform or other services we offer for its new customers or keep existing customers on the Software platform. In addition, even if ADT continues to use the Software platform, we cannot assure you that the revenue from ADT or new accounts added by ADT will reach or exceed historical levels in any future period. We may not be able to offset any unanticipated decline in revenue from ADT with revenues from new customers or other existing customers. Because the Software platform relies on ADT for substantially all of its revenue, any negative developments in ADT's business, or any decrease in revenue from or loss of ADT as a customer could harm our business, financial condition, cash flows and results of operations.

We have relatively limited visibility regarding the consumers that ultimately purchase our solutions, and we often rely on information from third-party service providers to help us manage our business. If these service providers fail to provide timely or accurate information, our ability to quickly react to market changes and effectively manage our business may be harmed.

We sell our solutions through service provider partners. These service provider partners work with consumers to design, install, update and maintain their connected home and commercial installations and manage the relationship with our subscribers. While we are able to track orders from service provider partners and have access to certain information about the configurations of their Alarm.com systems that we receive through our platforms, we also rely on service provider partners to provide us with information about consumer behavior, product and system feedback, consumer demographics and buying patterns. We use this channel sell-through data, along with other metrics, to forecast our revenue, assess consumer demand for our solution, develop new solutions, adjust pricing and make other strategic business decisions. Channel sell-through data is subject to limitations due to collection methods and the third-party nature of the data and thus may not be complete or accurate. If we do not receive consumer information on a timely or accurate basis, or if we do not properly interpret this information, our ability to quickly react to market changes and effectively manage our business may be harmed.

Consumers may choose to adopt point products that provide control of discrete functions rather than adopting our connected property platforms. If we are unable to increase market awareness of the benefits of our unified solutions, our revenue may not continue to grow, or it may decline.

Many vendors have emerged, and may continue to emerge, to provide point products with advanced functionality for use in connected properties, such as a video doorbell or thermostat that can be controlled by an application on a smartphone. We expect more and more consumer electronic and consumer appliance products to be network-aware and connected — each very likely to have its own smart device (phone or tablet) application. Consumers may be attracted to the relatively low costs of these point products and the ability to expand their connected property control solution over time with minimal upfront costs, despite some of the disadvantages of this approach, which may reduce demand for our connected property solutions. If so, our service provider partners may switch and offer the point products and services of competing companies, which would adversely affect our sales and profitability. If a significant number of consumers in our target market choose to adopt point products rather than our connected property solutions, then our business, financial condition, cash flows and results of operations will be harmed, and we may not be able to achieve sustained growth or our business may decline.

Mergers or other strategic transactions involving our competitors could weaken our competitive position, which could adversely affect our ability to compete effectively and harm our results of operations.

Our industry is highly fragmented, and we believe it is likely that some of our existing competitors will consolidate or be acquired. In addition, some of our competitors may enter into new alliances with each other or may establish or strengthen cooperative relationships with systems integrators, third-party consulting firms or other parties. Any such consolidation, acquisition, alliance or cooperative relationship could adversely affect our ability to compete effectively and lead to pricing pressure and our loss of market share and could result in a competitor with greater financial, technical, marketing, service and other resources, all of which could harm our business, financial condition, cash flows and results of operations.

We are dependent on our connected property solutions, and the lack of continued market acceptance of our connected property solutions would result in lower revenue.

Our connected property solutions account for substantially all of our revenue and will continue to do so for the foreseeable future. As a result, our revenue could be reduced by:

- any decline in demand for our connected property solutions;
- the failure of our connected property solutions to achieve continued market acceptance;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our connected property solutions;
- technological innovations or new communications standards that our connected property solutions do not address; and
- our inability to release enhanced versions of our connected property solutions on a timely basis.

We are vulnerable to fluctuations in demand for Internet-connected devices in general and interactive security systems in particular. If the market for connected home and commercial solutions grows more slowly than anticipated or if demand for connected home and commercial solutions does not grow as quickly as anticipated, whether as a result of competition, product obsolescence, technological change, unfavorable economic conditions, uncertain geopolitical environments, budgetary constraints of our consumers or other factors, we may not be able to continue to increase our revenue and earnings and our stock price would decline.

A significant decline in our SaaS and license revenue renewal rate would have an adverse effect on our business, financial condition, cash flows and results of operations.

We generally bill our service provider partners based on the number of subscribers they have on our platforms and the features being utilized by subscribers on a monthly basis in advance. Subscribers could elect to terminate our services in any given month. If our efforts and our service provider partners' efforts to satisfy our existing subscribers are not successful, we may not be able to retain them or sell additional functionality to them and, as a result, our revenue and ability to grow could be adversely affected. We track our SaaS and license revenue renewal rate on an annualized basis, as reflected in the section of this Quarterly Report titled "Management's Discussion and Analysis of Financial Condition and Results of Operations — Other Business Metrics — SaaS and License Revenue Renewal Rate." However, our service provider partners, who resell our services to our subscribers, have indicated that they typically have three to five-year service contracts with our subscribers. Our SaaS and license revenue renewal rate is calculated across our entire subscriber base, including subscribers whose contract with their service provider reached the end of its contractual term during the measurement period, as well as subscribers whose contract with their service provider has not reached the end of its contractual term during the measurement period, and is not intended to estimate the rate at which our subscribers renew their contracts with our service provider partners. As a result, we may not be able to accurately predict future trends in renewals and the resulting churn. Subscribers may choose not to renew their contracts for many reasons, including the belief that our service is not required for their needs or is otherwise not cost-effective, a desire to reduce discretionary spending, or a belief that our competitors' services provide better value. Additionally, our subscribers may not renew for reasons entirely out of our control, such as moving a residence or the dissolution of their business, which is particularly common for small to mid-sized businesses. A significant increase in our churn would have an adverse effect on our business, financial condition, cash flows or results of operations.

If we are unable to develop new solutions, sell our platforms and solutions into new markets or further penetrate our existing markets, our revenue may not grow as expected.

Our ability to increase sales will depend, in large part, on our ability to enhance and improve our platforms and solutions, introduce new solutions in a timely manner, sell into new markets and further penetrate our existing markets. The success of any enhancement or new solution or service depends on several factors, including the timely completion, introduction and market acceptance of enhanced or new solutions, the ability to maintain and develop relationships with service providers, the ability to attract, retain and effectively train sales and marketing personnel and the effectiveness of our marketing programs. Any new product or service we develop or acquire may not be introduced in a timely or cost-effective manner, and may not achieve the broad market acceptance necessary to generate significant revenue. Any new markets into which we attempt to sell our platforms and solutions, including new vertical markets and new countries or regions, may not be receptive. Our ability to further penetrate our existing markets depends on the quality, availability and reliability of our platforms and solutions and our ability to design our platforms and solutions to meet consumer demand.

We benefit from integration of our solutions with third-party platform providers. If these developers choose not to partner with us, or are acquired by our competitors, our business and results of operations may be harmed.

Our solutions are incorporated into the hardware of our third-party platform providers. For example, our hardware platform partners produce control devices that deliver our platform services to subscribers. It may be necessary in the future to renegotiate agreements relating to various aspects of these solutions or other third-party solutions. The inability to easily integrate with, or any defects in or disruption in the supply or availability of, any third-party solutions could result in increased costs, or in delays in new product releases or updates to our existing solutions until such issues have been resolved, which could have a material adverse effect on our business, financial condition, cash flows, results of operations and future prospects and could damage our reputation. In addition, if these third-party solution providers choose not to partner with us, choose to integrate their solutions with our competitors' platforms, or are unable or unwilling to update their solutions, our business, financial condition, cash flows and results of operations could be harmed. Further, if third-party solution providers that we partner with or that we would benefit from partnering with are acquired by our competitors, they may choose not to offer their solutions on our platforms, which could adversely affect our business, financial condition, cash flows and results of operations.

We rely on wireless carriers to provide access to wireless networks through which we provide our wireless alarm, notification and intelligent automation services, and any interruption of such access would impair our business.

We rely on wireless carriers to provide access to wireless networks for machine-to-machine data transmissions, which are an integral part of our services. Our wireless carriers may suspend wireless service to expand, maintain or improve their networks, or may discontinue or sunset older wireless networks as new technology evolves. For example, certain cellular carriers have announced their intention to shut down their 3G and CDMA wireless networks by the end of 2022 which may require our subscribers to upgrade to alternative and potentially more expensive, technologies. See "The technology we employ may become obsolete, and we may need to incur significant capital expenditures to update our technology" below. Any suspension or other interruption of services would adversely affect our ability to provide our services to our service provider partners and subscribers and may adversely affect our reputation. In addition, the inability to provide uninterrupted services, maintain our existing contracts with our wireless carriers or enter into new contracts with such wireless carriers could have a material adverse effect on our business, financial condition, cash flows and results of operations.

If we are unable to adapt to technological change, including maintaining compatibility with a wide range of devices, our ability to remain competitive could be impaired.

The market for connected home and commercial solutions is characterized by rapid technological change, frequent introductions of new products and evolving industry standards. Our ability to attract new subscribers and increase revenue from existing subscribers will depend in significant part on our ability to anticipate changes in industry standards, to continue to enhance our existing solutions or introduce new solutions on a timely basis to keep pace with technological developments, and to maintain compatibility with a wide range of connected devices in residential and commercial properties. We may change aspects of our platforms and may utilize open source technology in the future, which may cause difficulties including compatibility, stability and time to market. The success of any enhanced or new product or solution will depend on several factors, including the timely completion and market acceptance of the enhanced or new product or solution. Similarly, if any of our competitors implement new technologies before we are able to implement them, those competitors may be able to provide more effective products than ours, possibly at lower prices. Any delay or failure in the introduction of new or enhanced solutions could harm our business, financial condition, cash flows and results of operations.

The technology we employ may become obsolete, and we may need to incur significant capital expenditures to update our technology.

Our industry is characterized by rapid technological innovation. Our platforms and solutions interact with the hardware and software technology of systems and devices located at our subscribers' properties and we depend upon cellular, broadband and other telecommunications providers to provide communication paths to our subscribers in a timely and efficient manner. We may be required to implement new technologies or adapt existing technologies in response to changing market conditions, consumer preferences or industry standards, which could require significant capital expenditures. The discontinuation of cellular communication technology, cellular networks or other services by telecommunications service providers can affect our services and require our subscribers to upgrade to alternative and potentially more expensive, technologies. For example, certain cellular carriers have announced their intention to shut down their 3G and CDMA wireless networks by the end of 2022. We intend to work with our service providers to develop a transition plan over the next three years to convert or upgrade the equipment of end user accounts reliant upon 3G or CDMA networks, and we expect to incur incremental costs over the next three years related to the planned 3G and CDMA network shutdown. If our service providers are not able to convert or upgrade the equipment of their customers who are currently using 3G or CDMA network technology, then those accounts may be terminated with us when such networks are no longer available.

It is also possible that one or more of our competitors could develop a significant technical advantage that allows them to provide additional or superior quality products or services, or to lower their price for similar products or services, which could put us at a competitive disadvantage. Our inability to adapt to changing technologies, market conditions or consumer preferences in a timely manner could materially and adversely affect our business, financial condition, cash flows or results of operations.

We depend on our suppliers, and the loss of any key supplier could materially and adversely affect our business, financial condition, cash flows and results of operations.

Our hardware products depend on the quality of components that we procure from third-party suppliers. Reliance on suppliers, as well as industry supply conditions, generally involves several risks, including the possibility of defective parts, which can adversely affect the reliability and reputation of our platforms and solutions, and a shortage of components and reduced control over delivery schedules and increases in component costs, which can adversely affect our profitability. These supply chain risks are heightened in the current environment where evolving travel restrictions and shelter-in-place orders due to the COVID-19 pandemic have and may continue to adversely affect production of and the timing of delivery of components. We have several large hardware suppliers from which we procure hardware on a purchase order basis, including one supplier that supplied products and components, which generated 17% of our hardware and other revenue for the three months ended March 31, 2020. If these suppliers are unable to continue to provide a timely and reliable supply, we could experience interruptions in delivery of our platforms and solutions to our service provider partners, which could have a material adverse effect on our business, financial condition, cash flows and results of operations. If we were required to find alternative sources of supply, qualification of alternative suppliers and the establishment of reliable supplies could result in delays and a possible loss of sales, which could have a material adverse effect on our business, financial condition, cash flows and results of operations.

From time to time we provide advance payments or loans to our vendors to, for example, secure procurement of long lead time parts or to provide bridge financing to ensure continuity of operations. We provided such advance payments and loan financing that was repaid in 2019 to one of our key hardware suppliers, whose products generated between 15% and 25% of our hardware and other revenue over the last twelve months. See Note 8 to our condensed consolidated financial statements for more information regarding this matter.

Growth of our business will depend on market awareness and a strong brand, and any failure to develop, maintain, protect and enhance our brand would hurt our ability to retain or attract subscribers.

We believe that building and maintaining market awareness, brand recognition and goodwill in a cost-effective manner is important to our overall success in achieving widespread acceptance of our existing and future solutions and is an important element in attracting new service provider partners and subscribers. An important part of our business strategy is to increase service provider and consumer awareness of our brand and to provide marketing leadership, services and support to our service provider partner network. This will depend largely on our ability to continue to provide high-quality solutions, and we may not be able to do so effectively. While we may choose to engage in a broader marketing campaign to further promote our brand, this effort may not be successful. Our efforts in developing our brand may be hindered by the marketing efforts of our competitors and our reliance on our service provider partners and strategic partners to promote our brand. If we are unable to cost-effectively maintain and increase awareness of our brand, our business, financial condition, cash flows and results of operations could be harmed.

We operate in the emerging and evolving connected property market, which may develop more slowly or differently than we expect. If the connected property market does not grow as we expect, or if we cannot expand our platforms and solutions to meet the demands of this market, our revenue may decline, fail to grow or fail to grow at an accelerated rate, and we may incur operating losses.

The market for solutions that bring objects and systems not typically connected to the Internet, such as home automation, security monitoring, video monitoring, energy management and wellness solutions, into an Internet-like structure is in an early stage of development, and it is uncertain how rapidly or how consistently this market will develop and the degree to which our platforms and solutions will be accepted into the markets in which we operate. Some consumers may be reluctant or unwilling to use our platforms and solutions for a number of reasons, including satisfaction with traditional solutions, concerns about additional costs, concerns about data privacy and lack of awareness of the benefits of our platforms and solutions. Our ability to expand the sales of our platforms and solutions into new markets depends on several factors, including the awareness of our platforms and solutions, the timely completion, introduction and market acceptance of our platforms and solutions, the ability to attract, retain and effectively train sales and marketing personnel, the ability to develop relationships with service providers, the effectiveness of our marketing programs, the costs of our platforms and solutions and the success of our competitors. If we are unsuccessful in developing and marketing our platforms and solutions into new markets, or if consumers do not perceive or value the benefits of our platforms and solutions, the market for our platforms and solutions might not continue to develop or might develop more slowly than we expect, either of which would harm our revenue and growth prospects.

Risks of liability from our operations are significant.

The nature of the solutions we provide, including our interactive security solutions, potentially exposes us to greater risks of liability for data privacy and security, employee acts or omissions, or technology or system failure than may be inherent in other businesses. Substantially all of our service provider partner agreements contain provisions limiting our liability to service provider partners and our subscribers in an attempt to reduce this risk. However, in the event of litigation with respect to these matters, we cannot assure you that these limitations will be enforced, and the costs of such litigation could have a material adverse effect on us. Moreover, in the event of any regulatory investigations or actions against us related to these matters, we could be subject to additional risks and liabilities, including significant fines by U.S. federal and state authorities, foreign data privacy authorities in the EU, Canada, and other countries, in addition to the costs of such investigations, all of which could have a material adverse effect on us. In addition, there can be no assurance that we are adequately insured for these risks. Certain of our insurance policies and the laws of some states may limit or prohibit insurance coverage for punitive or certain other types of damages or liability arising from gross negligence.

Our strategy includes pursuing acquisitions, and our potential inability to successfully integrate newly-acquired technologies, assets or businesses may harm our financial results. Future acquisitions of technologies, assets or businesses which are paid for partially or entirely through the issuance of stock or stock rights, could dilute the ownership of our existing stockholders.

We believe part of our growth will continue to be driven by acquisitions of other companies or their technologies, assets and businesses. On March 8, 2017, we acquired Icontrol's Connect and Piper business units, and on October 21, 2019, we acquired 85% of the issued and outstanding shares of capital stock of PC Open Incorporated, doing business as OpenEye. We have acquired other businesses in the past. For example, we acquired the assets of HiValley Technology Inc. in March 2015, and we acquired certain assets of ObjectVideo, Inc. in January 2017. These acquisitions and any other acquisitions we may complete in the future will give rise to certain risks, including:

- incurring higher than anticipated capital expenditures and operating expenses;
- failing to assimilate and integrate the operations and personnel or failing to retain the key personnel of the acquired company or business;

- failing to retain customers and service providers and other third-party business partners seeking to terminate or renegotiate their relationships with us;
- failing to integrate the acquired technologies, or incurring significant expense to integrate acquired technologies into our platforms and solutions;
- disrupting our ongoing business;
- encountering complexities associated with managing a larger, more complex and growing business;
- diverting our management's attention and other company resources;
- failing to maintain uniform standards, controls and policies;
- incurring significant accounting charges;
- impairing relationships with employees, service provider partners or subscribers;
- finding that the acquired technology, asset or business does not further our business strategy, that we overpaid for the technology, asset or business or that we may be required to write off acquired assets or investments partially or entirely;
- failing to realize the expected synergies of the transaction;
- being exposed to unforeseen liabilities and contingencies that were not identified prior to acquiring the company; and
- being unable to generate sufficient revenue and profits from acquisitions to offset the associated acquisition costs.

Fully integrating an acquired technology, asset or business into our operations may take a significant amount of time. We may not be successful in overcoming these risks or any other problems encountered with acquisitions. To the extent we do not successfully avoid or overcome the risks or problems related to any such acquisitions, or fail to manage the acquired business or execute our integration and growth strategy in an efficient and effective manner, our business, financial condition, cash flows and results of operations could be harmed. Acquisitions also could impact our financial position and capital requirements, or could cause fluctuations in our quarterly and annual results of operations. Acquisitions could include significant goodwill and intangible assets, which may result in future impairment charges that would reduce our stated earnings. We may incur significant costs in our efforts to engage in strategic transactions and these expenditures may not result in successful acquisitions.

We expect that the consideration we might pay for any future acquisitions of technologies, assets or businesses could include stock, rights to purchase stock, cash or some combination of the foregoing. If we issue stock or rights to purchase stock in connection with future acquisitions, net income per share and then-existing holders of our common stock may experience dilution.

We may pursue business opportunities that diverge from our current business model, which may cause our business to suffer.

We may pursue business opportunities that diverge from our current business model, including but not limited to expanding our platforms and solutions and investing in new and unproven technologies. We can offer no assurance that any such new business opportunities will prove to be successful. Among other negative effects, our pursuit of such business opportunities could reduce operating margins and require more working capital, subject us to additional federal, state, and local laws and regulations, materially and adversely affect our business, financial condition, cash flows or results of operations.

Evolving government and industry regulation and changes in applicable laws relating to the Internet and data privacy may increase our expenditures related to compliance efforts or otherwise limit the solutions we can offer, which may harm our business and adversely affect our financial condition.

As Internet commerce continues to evolve, federal, state or foreign agencies have adopted and could in the future adopt regulations covering issues such as user privacy and content. We are particularly sensitive to these risks because the Internet is a critical component of our SaaS business model. In addition, taxation of products or services provided over the Internet or other charges imposed by government agencies or by private organizations for accessing the Internet may be imposed. Any regulation imposing greater fees for Internet use or restricting information exchange over the Internet could result in a decline in the use of the Internet and the viability of Internet-based services, which could harm our business.

Our platforms and solutions enable us to collect, manage and store a wide range of data related to our subscribers' interactive security, intelligent automation, video monitoring, energy management and wellness systems. A valuable component of our platforms and solutions is our ability to analyze this data to present the user with actionable business intelligence. We obtain our data from a variety of sources, including our service provider partners, our subscribers and third-party providers. We

cannot assure you that the data we require for our proprietary data sets will be available from these sources in the future or that the cost of such data will not increase. The United States federal government and various state governments have adopted or proposed limitations on the collection, distribution, storage and use of personal information. Several foreign jurisdictions, including the European Union and the United Kingdom, have adopted legislation (including directives or regulations) that is more rigorous governing data collection and storage than in the United States.

On June 28, 2018, the State of California enacted the California Consumer Privacy Act of 2018, or CCPA, which took effect on January 1, 2020. The CCPA governs the collection, sale and use of California residents' personal information, and significantly impacts businesses' handling of personal information and privacy policies and procedures. The CCPA, as well as data privacy laws that have been proposed in other states, may limit our ability to use, process and store certain data, which may decrease adoption of our platforms and solutions, affect our relationships with service provider partners and our suppliers, increase our costs for compliance, and harm our business, financial condition, cash flows and results of operations. In addition, the CCPA may subject us to regulatory fines by the State of California, individual claims, and increased commercial liabilities.

The United States and the European Union, or EU, have a cooperative program for transferring personal data, referred to as the Privacy Shield, that went into effect on August 1, 2016. We have self-certified our compliance with the Privacy Shield framework since September 2016 and we rely on our Privacy Shield certification when transferring personal data from the EU and Switzerland to the United States. Furthermore, in certain circumstances, we use Model Contracts to transfer personal data from the EU to the United States in compliance with the European Commission's Directive on Data Protection. However, the validity of these data transfer mechanisms is continually being challenged in EU courts. Further uncertainty may result due to the withdrawal of the United Kingdom, or UK, from the EU, which occurred on January 31, 2020. While EU law continues to apply to the UK during the transition period that ends on December 31, 2020, the UK and EU must finalize an agreement before the end of the transition period and may be unable to do so. As a result of these ongoing challenges, there will continue to be significant regulatory uncertainty surrounding the validity of data transfers from the EU and the UK to the United States. Various non-EU jurisdictions may also choose to impose data localization laws limiting the transfer of personal data out of the jurisdiction, or our European-based service provider partners may require similar contractual restrictions regarding data localization. Such laws or contractual restrictions may increase our costs for compliance, and harm our business, financial condition, cash flows and results of operations.

The EU's General Data Protection Regulation, or GDPR, went into effect on May 25, 2018. Prior to May 25, 2018, we updated existing privacy and data security measures to comply with GDPR. As guidance on compliance with GDPR from the EU data protection authorities evolves over time, our privacy or data security measures may be deemed or perceived to be in noncompliance with current or future laws and regulations, which may subject us to litigation, regulatory investigations or other liabilities and could limit the products and services we can offer in certain jurisdictions. Further, in the event of a breach of personal information that we hold, we may be subject to governmental fines, individual claims, remediation expenses and/or harm to our reputation. Moreover, if future laws and regulations limit our ability to use and share this data or our ability to store, process and share data over the Internet, demand for our platforms and solutions could decrease, our costs could increase, and our business, financial condition, cash flows and results of operations could be harmed.

Furthermore, Brazil's comprehensive privacy law, the General Data Protection Law, or LGPD, is scheduled to go into effect in August 2020. The LGPD creates a new legal framework for the use, processing and storage of Brazilians' personal data, and it adds significant privacy and security obligations for companies processing personal data in Brazil. The LGPD may limit our and our service providers' ability to use, process and store certain data, which may decrease adoption of our platforms and solutions, affect our relationships with our service provider partners and suppliers, increase our costs for compliance, and harm our business, financial condition, cash flows and results of operations. In addition, the LGPD may subject us to regulatory fines by the Brazilian Data Protection Authority and increased commercial liabilities.

Since April 2018 we have offered a solution for certain service provider partners who may be subject to the Health Insurance Portability and Accountability Act of 1996, and its implementing regulations, or HIPAA, which regulates the use and disclosure of Protected Health Information, or PHI. As a result, we are subject to HIPAA when PHI is accessed, created, maintained or transmitted through our solution by these service provider partners. We have implemented additional privacy and security policies and procedures, as well as administrative, physical and technical safeguards to enable our solution to be HIPAA compliant. Additionally, HIPAA compliance has required us to put in place certain agreements with contracting partners and to appoint a Privacy Officer and Security Officer. If our privacy and security policies or other safeguards for PHI are deemed to be in noncompliance by the United States Department of Health and Human Services, or HHS, we may be subject to litigation, regulatory investigations or other liabilities. In the event of a breach of PHI that we hold, we may be subject to governmental fines, individual claims under state privacy laws governing personal health information, remediation expenses and/or harm to our reputation. Furthermore, if future changes to HIPAA or state privacy laws governing PHI expand the definition of PHI or put more restrictions on our ability to use, process and store PHI, then HIPAA compliance for our solutions as currently constituted may be costly both financially and in terms of administrative resources. Ongoing compliance efforts may take substantial time and require the assistance of external resources, such as attorneys, information technology, and/or other consultants and advisors.

We rely on the performance of our senior management and highly skilled personnel, and if we are unable to attract, retain and motivate well-qualified employees, our business and results of operations could be harmed.

We believe our success has depended, and continues to depend, on the efforts and talents of senior management and key personnel, including Stephen Trundle, our Chief Executive Officer, and our senior information technology managers. Our future success depends on our continuing ability to attract, develop, motivate and retain highly qualified and skilled employees. Qualified individuals are in high demand, and we may incur significant costs to attract them. In addition, the loss of any of our senior management or key personnel, including as a result of the COVID-19 pandemic, could interrupt our ability to execute our business plan, as such individuals may be difficult to replace. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business and results of operations could be harmed.

We provide minimum service level commitments to certain of our service provider partners, and our failure to meet them could cause us to issue credits for future services or pay penalties, which could harm our results of operations.

Certain of our service provider partner agreements currently, and may in the future, provide minimum service level commitments regarding items such as uptime, functionality or performance. If we are unable to meet the stated service level commitments for these service provider partners or suffer extended periods of service unavailability, we are or may be contractually obligated to provide these service provider partners with credits for future services, provide services at no cost or pay other penalties, which could adversely impact our revenue. We have incurred such penalties in the past, which have reduced our revenue. We do not currently have any reserves on our balance sheet for these commitments.

We have indemnity obligations to certain of our service provider partners for certain expenses and liabilities, which could force us to incur substantial costs.

We have indemnity obligations to certain of our service provider partners for certain claims regarding our platforms and solutions, including security breach, product recall, epidemic failure, and product liability claims. As a result, in the case of any such claims against these service provider partners, we could be required to indemnify them for losses resulting from such claims or to refund amounts they have paid to us. We expect that some of our service provider partners may seek indemnification from us in the event that such claims are brought against them. In addition, we may elect to indemnify service provider partners where we have no contractual obligation to do so and we will evaluate each such request on a case-by-case basis. If a service provider partner elects to invest resources in enforcing a claim for indemnification against us, we could incur significant costs disputing it. If we do not succeed in disputing it, we could face substantial liability.

We may be subject to significant additional liabilities as a result of the Acquisition for which we will not be indemnified.

In connection with the Acquisition, we assumed certain historic liabilities of the Connect and Piper business units, including pre-closing liabilities relating to current and former employees of the Connect and Piper business units, pre-closing compliance by the Connect and Piper business units with applicable laws and pre-closing performance by the Connect and Piper business units of the assumed contracts. In addition, we assumed any liabilities that may arise from certain pending intellectual property litigation. In addition to the known liabilities we assumed, there could be unasserted claims or assessments that we failed or were unable to discover or identify in the course of performing due diligence investigations and there may be liabilities that are neither probable nor estimable at this time which may become probable and estimable in the future. Further, while the terms of the Acquisition transaction documents provide for us to be indemnified for breaches of certain representations and warranties made about the Connect and Piper business units, the liabilities that arise may not entitle us to contractual indemnification or our contractual indemnification may not be effective. Any such liabilities, individually or in the aggregate, could have a material adverse effect on our business and our prospects.

We may not be able to secure additional financing on favorable terms, or at all, to meet our future capital needs.

In the future, we may require additional capital to respond to business opportunities, challenges, acquisitions or unforeseen circumstances and may determine to engage in equity or debt financings or enter into credit facilities for other reasons. For example, we recently borrowed \$50.0 million under the 2017 Facility as a precautionary measure to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic. As a result, our current availability under the 2017 Facility is only \$12.0 million. We may require additional capital to respond to the significant uncertainty arising from the COVID-19 pandemic and we may not be able to timely secure additional debt or equity financing on favorable terms or at all. Any debt financing obtained by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be limited.

Goodwill and other identifiable intangible assets represent a significant portion of our total assets, and we may never realize the full value of our intangible assets.

As of March 31, 2020, we had \$204.4 million of goodwill and identifiable intangible assets. Goodwill and other identifiable intangible assets are recorded at fair value on the date of acquisition. We review such assets for impairment at least annually. Impairment may result from, among other things, deterioration in performance, adverse market conditions, including adverse market conditions arising from the COVID-19 pandemic, adverse changes in applicable laws or regulations, including changes that restrict the activities of or affect the solutions we offer, challenges to the validity of certain registered intellectual property, reduced sales of certain products or services incorporating registered intellectual property, increased attrition and a variety of other factors. The amount of any quantified impairment must be expensed immediately as a charge to results of operations. Depending on future circumstances, it is possible that we may never realize the full value of our intangible assets. Any future determination of impairment of goodwill or other identifiable intangible assets could have a material adverse effect on our financial position and results of operations.

Comprehensive tax reform bills could adversely affect our business and financial condition.

The U.S. government has enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected.

We may be subject to additional tax liabilities, which would harm our results of operations.

We are subject to income, sales, use, value added and other taxes in the United States and other countries in which we conduct business, which laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect sales, use, value added or other taxes on our sales may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future. Significant judgment is required in determining our worldwide provision for income taxes. These determinations are highly complex and require detailed analysis of the available information and applicable statutes and regulatory materials. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be different from our historical tax practices, provisions and accruals. If we receive an adverse ruling as a result of an audit, or we unilaterally determine that we have misinterpreted provisions of the tax regulations to which we are subject, our tax provision, results of operations or cash flows could be harmed. In addition, liabilities associated with taxes are often subject to an extended or indefinite statute of limitations period. Therefore, we may be subject to additional tax liability (including penalties and interest) for a particular year for extended periods of time.

If the U.S. insurance industry were to change its practice of providing incentives to homeowners for the use of alarm monitoring services, we could experience a reduction in new subscriber growth or an increase in our subscriber attrition rate.

It has been common practice in the U.S. insurance industry to provide a reduction in rates for policies written on residences that have monitored alarm systems. There can be no assurance that insurance companies will continue to offer these rate reductions. If these incentives were reduced or eliminated, new homeowners who otherwise may not feel the need for alarm monitoring services would be removed from our potential subscriber pool, which could hinder the growth of our business, and existing subscribers may choose to disconnect or not renew their service contracts, which could increase our attrition rates. In either case, our results of operations and growth prospects could be adversely affected.

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

We conduct our business in the United States and in various other countries. We are subject to regulation by various federal, state, local and foreign governmental agencies, including, but not limited to, agencies and regulatory bodies or authorities responsible for monitoring and enforcing product safety and consumer protection laws, data privacy and security laws and regulations, employment and labor laws, workplace safety laws and regulations, environmental laws and regulations, antitrust laws, federal securities laws and tax laws and regulations.

We are subject to the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. Travel Act, and possibly other anti-bribery laws, including those that comply with the Organization for Economic Cooperation and Development, or OECD, Convention on Combating Bribery of Foreign Public Officials in International Business Transactions and other international conventions. Anti-corruption laws are interpreted broadly and prohibit our company from authorizing, offering, or providing directly or indirectly improper payments or benefits to recipients in the public or private-sector. Certain laws could also prohibit us from soliciting or accepting bribes or kickbacks. Our company has direct government interactions and in several cases uses third-party representatives, including dealers, for regulatory compliance,

sales and other purposes in a variety of countries. These factors increase our anti-corruption risk profile. We can be held liable for the corrupt activities of our employees, representatives, contractors, partners and agents, even if we did not explicitly authorize such activity. Although we have implemented policies and procedures designed to ensure compliance with anti-corruption laws, there can be no assurance that all of our employees, representatives, contractors, partners, and agents will comply with these laws and policies.

Our global operations require us to import from and export to several countries, which geographically stretches our compliance obligations. We are also subject to anti-money laundering laws such as the USA PATRIOT Act and may be subject to similar laws in other jurisdictions. Our platforms and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our platforms and solutions must be made in compliance with these laws and regulations. We may also be subject to import/export laws and regulations in other jurisdictions in which we conduct business. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers. In addition, if our service provider partners fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected through reputational harm and penalties. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. In addition, changes in our platforms or solutions or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our platforms and solutions in international markets, prevent our service provider partners with international operations from deploying our platforms and solutions or, in some cases, prevent the export or import of our platforms and solutions to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our platforms and solutions, or in our decreased ability to export or sell our platforms and solutions to existing or potential service provider partners with international operations. Any decreased use of our platforms and solutions or limitation on our ability to export or sell our platforms and solutions would likely adversely affect our business, financial condition, cash flows and results of operations.

In addition, our software contains encryption technologies, certain types of which are subject to U.S. and foreign export control regulations and, in some foreign countries, restrictions on importation and/or use. Any failure on our part to comply with encryption or other applicable export control requirements could result in financial penalties or other sanctions under the U.S. export regulations, including restrictions on future export activities, which could harm our business and operating results. Regulatory restrictions could impair our access to technologies needed to improve our platforms and solutions and may also limit or reduce the demand for our platforms and solutions outside of the United States.

Furthermore, U.S. export control laws and economic sanctions programs prohibit the shipment of certain products and services to countries, governments and persons that are subject to U.S. economic embargoes and trade sanctions. Even though we take precautions to prevent our platforms and solutions from being shipped or provided to U.S. sanctions targets, our platforms and solutions could be shipped to those targets or provided by third-parties despite such precautions. Any such shipment could have negative consequences, including government investigations, penalties and reputational harm. Furthermore, any new embargo or sanctions program, or any change in the countries, governments, persons or activities targeted by such programs, could result in decreased use of our platforms and solutions, or in our decreased ability to export or sell our platforms and solutions to existing or potential service provider partners, which would likely adversely affect our business, financial condition, cash flows and results of operations.

Changes in laws that apply to us could result in increased regulatory requirements and compliance costs which could harm our business, financial condition, cash flows and results of operations. In certain jurisdictions, regulatory requirements may be more stringent than in the United States. Noncompliance with applicable regulations or requirements could subject us to whistleblower complaints, investigations, sanctions, settlements, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions, suspension or debarment from contracting with certain governments or other customers, the loss of export privileges, multi-jurisdictional liability, reputational harm, and other collateral consequences. If any governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition, cash flows and results of operations could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and an increase in defense costs and other professional fees. Enforcement actions and sanctions could further harm our business, financial condition, cash flows and results of operations.

We face many risks associated with our international business operations and our plans to expand internationally, which could harm our business, financial condition, cash flows and results of operations.

We anticipate that our efforts to operate and continue to expand our business internationally will entail additional costs and risks as we establish our international offerings and develop relationships with service provider partners to market, sell, install, and support our platforms, solutions and brand in other countries. Revenue in countries outside of North America accounted for 2% of our total revenue for each of the three months ended March 31, 2020 and 2019. We have limited experience in selling

our platforms and solutions in international markets outside of North America or in conforming to the local cultures, standards, or policies necessary to successfully compete in those markets, and we may be required to invest significant resources in order to do so. We may not succeed in these efforts or achieve our consumer acquisition, service provider expansion or other goals. In some international markets, consumer preferences and buying behaviors may be different, and we may use business or pricing models that are different from our traditional model to provide our platforms and solutions to consumers in those markets or we may be unsuccessful in implementing the appropriate business model. Our revenue from new foreign markets may not exceed the costs of establishing, marketing, and maintaining our international offerings. In addition, the current instability in the eurozone and parts of Asia could have many adverse consequences on our international expansion. These could include sovereign default, liquidity and capital pressures on financial institutions in other parts of the world including the eurozone, reducing the availability of credit and increasing the risk of financial sector failures and the risk of one or more eurozone member states leaving the euro, resulting in the possibility of capital and exchange controls and uncertainty about the impact of contracts and currency exchange rates.

In addition, conducting expanded international operations subjects us to additional risks that we do not generally face in our North American markets. These risks include:

- localization of our solutions, including the addition of foreign languages and adaptation to new local practices, as well as certification, registration and other regulatory requirements;
- lack of experience in other geographic markets;
- strong local competitors;
- the cost and burden of complying with, lack of familiarity with, and unexpected changes in, foreign legal and regulatory requirements, including the development of policies and procedures for different countries when requirements under privacy regulations in such countries may conflict or be inconsistent with one another;
- difficulties in managing and staffing international operations;
- increased costs due to new or potential tariffs, penalties, trade restrictions and other trade barriers;
- fluctuations in currency exchange rates or restrictions on foreign currency;
- potentially adverse tax consequences, including the complexities of transfer pricing, value added or other tax systems, double taxation and restrictions and/or taxes on the repatriation of earnings;
- dependence on third parties, including commercial partners with whom we do not have extensive experience;
- increased financial accounting and reporting burdens and complexities;
- political, social, and economic instability, terrorist attacks, and security concerns in general; and
- reduced or varied protection for intellectual property rights in some countries.

Operating in international markets also requires significant management attention and financial resources. The investment and additional resources required to establish operations and manage growth in other countries may not produce desired levels of revenue or profitability.

Our software contains encryption technologies, certain types of which are subject to U.S. and foreign export control regulations and, in some foreign countries, restrictions on importation and/or use. Any failure on our part to comply with encryption or other applicable export control requirements could result in financial penalties or other sanctions under the U.S. export regulations, including restrictions on future export activities, which could harm our business and operating results. Regulatory restrictions could impair our access to technologies needed to improve our platforms and solutions and may also limit or reduce the demand for our platforms and solutions outside of the United States.

Enhanced United States tax, tariff, import/export restrictions, or other trade barriers may have an adverse impact on global economic conditions, financial markets and our business.

There is currently significant uncertainty about the future relationship between the United States and various other countries, including China, the European Union, Canada, and Mexico, with respect to trade policies, treaties, tariffs and customs duties, and taxes. In 2019, the U.S. administration imposed significant changes to U.S. trade policy with respect to China. Tariffs have subjected certain Alarm.com products manufactured overseas to additional import duties of up to 25%. The amount of the import tariff and the number of products subject to tariffs have changed numerous times based on action by the U.S. administration. We are addressing the risks related to these imposed and announced tariffs, which have affected, or have the potential to affect, at least some of our imports from China.

Between one-third to one-half of the finished goods hardware products that we sell to our customers are imported from China and could be subject to increased tariffs. Other Alarm.com finished goods hardware products that are not manufactured in China may contain subcomponents made in China that could also be subject to increased tariffs. While the additional import duties resulted in an increase to our cost of hardware revenue, these import duties had a modest impact on hardware revenue margins. If tariffs, trade restrictions, or trade barriers are expanded or interpreted by a court or governmental agency to apply to more of our products, then our exposure to future taxes and duties on such imported products and components could be significant and could have a material effect on our financial results. If our products are deemed to be subject to additional duties and taxes as determined by a court or governmental agency, we may suffer additional hardware revenue margin erosion or be required to raise our prices on certain imported products. There can be no assurance that we will not experience a disruption in our business or harm to our financial condition related to these or other changes in trade practices, and any changes to our operations or our sourcing strategy in order to mitigate any such tariff costs could be complicated, time-consuming, and costly. Furthermore, our business may be adversely affected by retaliatory trade measures taken by China and other countries, which could materially harm our business, financial condition and results of operations. Trade barriers, or the perception that any of them could be imposed, may have a negative effect on global economic conditions and the stability of global financial markets, and may significantly reduce global trade and, in particular, trade between these nations and the United States. Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

The incurrence of debt may impact our financial position and subject us to additional financial and operating restrictions.

On October 6, 2017, we entered into a \$125.0 million senior secured revolving credit facility, or the 2017 Facility, with Silicon Valley Bank, or SVB, as administrative agent, PNC Bank, National Association, as documentation agent, and a syndicate of lenders. Upon entry into the 2017 Facility, we borrowed \$72.0 million, which was used to repay the previously outstanding balance under our previous credit facility. On November 30, 2018, we amended the 2017 Facility to incorporate the parameters that must be met for us to repurchase our outstanding common stock under the stock repurchase program authorized by our board of directors on November 29, 2018. During the three months ended March 31, 2020, we borrowed \$50.0 million under the 2017 Facility as a precautionary measure in order to provide financial flexibility in light of current uncertainty in the financial markets resulting from the global COVID-19 pandemic. The outstanding balance of the 2017 Facility was \$113.0 million as of March 31, 2020.

Our overall leverage and certain covenants and obligations contained in the related documentation could adversely affect our financial health and business and future operations by, among other things:

- making it more difficult to satisfy our obligations, including under the terms of the 2017 Facility;
- limiting our ability to refinance our debt on terms acceptable to us or at all;
- limiting our flexibility to plan for and adjust to changing business and market conditions and increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to use our available cash flow to fund future acquisitions, working capital, business activities, and other general corporate requirements; and
- limiting our ability to obtain additional financing for working capital, to fund growth or for general corporate purposes, even when necessary to maintain adequate liquidity.

Furthermore, substantially all of our assets, including our intellectual property, secure the 2017 Facility. If an event of default under the credit agreement occurs and is continuing, SVB may request the acceleration of the related debt and foreclose on the underlying security interests.

In addition, our 2017 Facility restricts our ability to make dividend payments and requires us to maintain certain leverage ratios, which may restrict our ability to invest in future growth. Any of the foregoing could have a material adverse effect on our business, financial condition, cash flows or results of operations.

The LIBOR calculation method may change and LIBOR is expected to be phased out after 2021.

Our 2017 Facility permits interest on the outstanding principal balance to be calculated based on LIBOR, plus an applicable margin based on our consolidated leverage ratio. On July 27, 2017, the U.K. Financial Conduct Authority, or the FCA, announced that it will no longer require banks to submit rates for the calculation of LIBOR after 2021. In the meantime, actions by the FCA, other regulators or law enforcement agencies may result in changes to the method by which LIBOR is calculated. At this time, it is not possible to predict the effect of any such changes or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere.

Our financial results may be adversely affected by changes in accounting principles applicable to us.

Our accounting policies are critical to the manner in which we present our results of operations and financial condition. Many of these policies are highly complex and involve many assumptions, estimates and judgments. A change in accounting standards or practices, in particular with respect to revenue recognition, could harm our operating results and may even affect our reporting of transactions completed before the change is effective. GAAP rules are subject to interpretation by the Financial Accounting Standards Board, or FASB, the SEC and other various bodies formed to promulgate and interpret appropriate accounting principles. For example, we adopted Accounting Standards Update, or ASU, 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*," or Topic 326, effective January 1, 2020, which provides guidance designed to provide financial statement users with more information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. See Note 2 to our condensed consolidated financial statements for additional information about the impact of this accounting standard and other new accounting pronouncements. Implementation of new accounting standards could have a significant effect on our financial results, and any difficulties in implementing these pronouncements could cause us to fail to meet our financial reporting obligations, which could result in regulatory discipline and harm investors' confidence in us.

Our accounting is becoming more complex, and relies upon estimates or judgments relating to our critical accounting policies. If our accounting is erroneous or based on assumptions that change or prove to be incorrect, our operating results could fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes, and also to comply with many complex requirements and standards. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates and any such differences may be material. We devote substantial resources to compliance with accounting requirements and we base our estimates on our best judgment, historical experience, information derived from third parties, 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. However, various factors are causing our accounting to become complex. For example, as a result of our acquisition of the Connect business unit of Icontrol, we now recognize revenue relating to the delivery of software relating to the Software platform under different revenue recognition standards than those that apply to delivery of our services under the Alarm.com platforms. Ongoing evolution of our business, and the COVID-19 pandemic and resulting uncertainty have, and any future acquisitions may, compound these complexities. Our operating results may be adversely affected if we make accounting errors or our judgments prove to be wrong, assumptions change or actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors or guidance we may have provided, resulting in a decline in our stock price and potential legal claims. Significant judgments, assumptions and estimates used in preparing our condensed consolidated financial statements include those related to revenue recognition, stock-based compensation, business combinations, and income taxes.

Risks Related to Our Intellectual Property

If we fail to protect our intellectual property and proprietary rights adequately, our business could be harmed.

We believe that our proprietary technology is essential to establishing and maintaining our leadership position. We seek to protect our intellectual property through trade secrets, copyrights, confidentiality, non-compete and nondisclosure agreements, patents, trademarks, domain names and other measures, some of which afford only limited protection. We also rely on patent, trademark, trade secret and copyright laws to protect our intellectual property. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our technology or to obtain and use information that we regard as proprietary. Our means of protecting our proprietary rights may not be adequate or our competitors may independently develop similar or superior technology, or design around our intellectual property. 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. Intellectual property protections may also be unavailable, limited or difficult to enforce in some countries, which could make it easier for competitors to capture market share. Our failure or inability to adequately protect our intellectual property and proprietary rights could harm our business, financial condition, cash flows and results of operations.

To prevent substantial unauthorized use of our intellectual property rights, it may be necessary to prosecute actions for infringement and/or misappropriation of our proprietary rights against third parties. See the section of this Quarterly Report titled "Legal Proceedings" for additional information on related intellectual property litigation matters. Any such action could result in significant costs and diversion of our resources and management's attention, and we cannot assure you that we will be successful in such action. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce their intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property.

An assertion by a third party that we are infringing its intellectual property could subject us to costly and time-consuming litigation or expensive licenses that could harm our business and results of operations.

The industries in which we compete are characterized by the existence of a large number of patents, copyrights, trademarks and trade secrets, and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. We have been involved with patent litigation suits in the past and we may be involved with and subject to similar litigation in the future to defend our intellectual property position. For example, on June 2, 2015, Vivint filed a lawsuit against us in U.S. District Court, District of Utah, alleging that our technology directly and indirectly infringes six patents that Vivint purchased. Vivint is seeking permanent injunctions, enhanced damages and attorneys' fees. Should Vivint prevail on its claims that one or more elements of our solution infringe one or more of its patents, we could be required to pay damages of Vivint's lost profits and/or a reasonable royalty for sales of our solution, enjoined from making, using, and selling our solution if a license or other right to continue selling such elements is not made available to us or we are unable to design around such patents, and required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to Vivint's claims, any of these outcomes could result in a material adverse effect on our business.

In addition, on October 22, 2019, EcoFactor, filed a complaint with the ITC, and on November 22, 2019, the ITC instituted an investigation into EcoFactor's allegations, naming us, among several others, as respondents, alleging with respect to Alarm.com that Alarm.com's smart thermostats infringe three U.S. patents owned by EcoFactor. EcoFactor is seeking a permanent limited exclusion order and permanent cease and desist order. On November 11, 2019, EcoFactor filed a lawsuit against us in the U.S. District Court, District of Massachusetts, alleging infringement of the same three patents asserted against us in the ITC, seeking permanent injunctions, enhanced damages and attorneys' fees. On January 31, 2020, EcoFactor filed a lawsuit against us in the U.S. District Court for the Western District of Texas, alleging Alarm.com's products and services infringe four additional U.S. patents owned by EcoFactor. EcoFactor is seeking permanent injunctions, enhanced damages and attorneys' fees. See the section of this Quarterly Report titled "Legal Proceedings" for additional information on each of these matters. Should EcoFactor prevail in the ITC investigation, Alarm.com thermostats made abroad could be excluded from importation into the United States. Should EcoFactor prevail in either of its district court lawsuits we could be required to pay damages in the amount of EcoFactor's lost profits and/or a reasonable royalty for sales of our solution, we could be enjoined from making, using and selling our solution if a license or other right to continue selling such elements is not made available to us or we are unable to design around such patents, and we could be required to pay ongoing royalties and comply with unfavorable terms if such a license is made available to us. While we believe we have valid defenses to EcoFactor's claims, any of these outcomes could result in a material adverse effect on our business.

Even if we were to prevail in any of these matters, ongoing litigation could continue to be costly and time-consuming, divert the attention of our management and key personnel from our business operations and dissuade potential customers from purchasing our solution, which would also materially harm our business. During the course of each of these litigation matters, we anticipate announcements of the results of hearings and motions, and other interim developments related to the litigation matters at hand. If securities analysts or investors regard these announcements as negative, the market price of our common stock may decline.

We might not prevail in any intellectual property infringement litigation given the complex technical issues and inherent uncertainties in such litigation and our service provider partner contracts may require us to indemnify them against certain liabilities they may incur as a result of our infringement of any third party intellectual property. Defending such claims, regardless of their merit, could be time-consuming and distracting to management, result in costly litigation or settlement, cause development delays or require us to enter into royalty or licensing agreements. In addition, we currently have a limited portfolio of issued patents compared to our larger competitors, and therefore may not be able to effectively utilize our intellectual property portfolio to assert defenses or counterclaims in response to patent infringement claims or litigation brought against us by third parties. Further, litigation may involve patent holding companies or other adverse patent owners who have no relevant products or revenues and against which our potential patents provide no deterrence, and many other potential litigants have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. Given that our platforms and solutions integrate with many aspects of a property, the risk that our platforms and solutions may be subject to these allegations is exacerbated. As we seek to extend our platforms and solutions, we could be constrained by the intellectual property rights of others. If our platforms and solutions exceed the scope of in-bound licenses or violate any third party proprietary rights, we could be required to withdraw those solutions from the market, re-develop those solutions or seek to obtain licenses from third parties, which might not be available on reasonable terms or at all. Any efforts to re-develop our platforms and solutions, obtain licenses from third parties on favorable terms or license a substitute technology might not be successful and, in any case, might substantially increase our costs and harm our business, financial condition, cash flows and results of operations. If we were compelled to withdraw any of our platforms and solutions from the market, our business, financial condition, cash flows and results of operations could be harmed.

We have indemnity obligations to certain of our service provider partners for certain expenses and liabilities resulting from intellectual property infringement claims regarding our platforms and solutions, which could force us to incur substantial costs.

We have indemnity obligations to certain of our service provider partners for intellectual property infringement claims regarding our platforms and solutions. As a result, in the case of infringement claims against these service provider partners, we

could be required to indemnify them for losses resulting from such claims or to refund amounts they have paid to us. We expect that some of our service provider partners may seek indemnification from us in connection with infringement claims brought against them. In addition, we may elect to indemnify service provider partners where we have no contractual obligation to indemnify them and we will evaluate each such request on a case-by-case basis. If a service provider partner elects to invest resources in enforcing a claim for indemnification against us, we could incur significant costs disputing it. If we do not succeed in disputing it, we could face substantial liability. See the section of this Quarterly Report titled "Legal Proceedings" for additional information.

The use of open source software in our platforms and solutions may expose us to additional risks and harm our intellectual property.

Some of our platforms and solutions use or incorporate software that is subject to one or more open source licenses and we may incorporate open source software in the future. Open source software is typically freely accessible, usable and modifiable. Certain open source software licenses require a user who intends to distribute the open source software as a component of the user's software to disclose publicly part or all of the source code to the user's software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on potentially unfavorable terms to us or at no cost.

The terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign courts, and accordingly there is a risk that those licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to commercialize our platforms and solutions. In that event, we could be required to seek licenses from third parties in order to continue offering our platforms and solutions, to re-develop our platforms and solutions, to discontinue sales of our platforms and solutions or to release our proprietary software code under the terms of an open source license, any of which could harm our business. Further, given the nature of open source software, it may be more likely that third parties might assert copyright and other intellectual property infringement claims against us based on our use of these open source software programs. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, cash flows and results of operations or require us to devote additional research and development resources to change our solutions.

Although we are not aware of any use of open source software in our platforms and solutions that would require us to disclose all or a portion of the source code underlying our core solutions, it is possible that such use may have inadvertently occurred in deploying our platforms and solutions. Additionally, if a third party software provider has incorporated certain types of open source software into software we license from such third party for our platforms and solutions without our knowledge, we could, under certain circumstances, be required to disclose the source code to our platforms and solutions. This could harm our intellectual property position as well as our business, financial condition, cash flows and results of operations.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has been and will likely continue to be volatile.

The market price of our common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. Since shares of our common stock were sold in our initial public offering in June 2015 at a price of \$14.00 per share, our stock price has ranged from an intraday low of \$10.26 to an intraday high of \$71.50 through March 31, 2020. The market price of our common stock may decline regardless of our operating performance, resulting in the potential for substantial losses for our stockholders, and may fluctuate significantly in response to numerous factors, many of which are beyond our control, including the factors listed below and other factors described in this "Risk Factors" section:

- actual or anticipated fluctuations in our financial condition and operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of our company, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- ratings changes by any securities analysts who follow our company;
- variance in our financial performance from expectations of securities analysts;
- announcements by us or our competitors of significant business developments, technical innovations, acquisitions or new solutions;
- changes in the prices of our platforms and solutions;
- changes in our projected operating and financial results;

- changes in laws or regulations applicable to our platforms and solutions or marketing techniques, or our industry in general;
- our involvement in any litigation, including any lawsuits threatened or filed against us;
- repurchases of our common stock under the stock repurchase program authorized by our board of directors or our sale of our common stock or other securities in the future;
- changes in senior management or key personnel;
- trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory and market conditions in the United States and abroad as well as the uncertainty resulting from the COVID-19 pandemic.

The stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

Sales of a substantial number of shares of our common stock in the public market could cause our market price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales, particularly sales by our directors, executive officers, and significant stockholders, may have on the prevailing market price of our common stock. Additionally, the shares of common stock subject to outstanding options under our equity incentive plans and the shares reserved for future issuance under our equity incentive plans, as well as shares issuable upon vesting of restricted stock awards, will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. Moreover, some holders of shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders. We have also registered shares of common stock that we may issue under our employee equity incentive plans. Accordingly, these shares may be able to be sold freely in the public market upon issuance as permitted by any applicable vesting requirements.

We are obligated to develop and maintain a system of effective internal controls over financial reporting. These internal controls may be determined to be not effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We have been and are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting on an annual basis. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective and would be required to disclose any material weaknesses identified in Management's Report on Internal Control over Financial Reporting. While we have established certain procedures and control over our financial reporting processes, we cannot assure you that these efforts will prevent restatements of our financial statements in the future.

Our independent registered public accounting firm is also required, pursuant to Section 404 of the Sarbanes-Oxley Act, to report on the effectiveness of our internal control over financial reporting. For future reporting periods, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. We may not be able to remediate any future material weaknesses, or to complete our evaluation, testing and any required remediation in a timely fashion.

If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion that our internal controls over financial reporting are effective, investors could lose confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline, and we could be subject to sanctions or investigations by regulatory authorities, including the SEC and Nasdaq. Failure to remediate any material weakness in our internal control over financial reporting, or to maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our share price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors and subject to the restrictions on paying dividends in our 2017 Facility and any future indebtedness. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Concentration of ownership among our current directors, executive officers and their affiliates may limit an investor's ability to influence significant corporate decisions.

As of March 31, 2020, our directors and executive officers, together with their affiliates, beneficially own a significant percentage of our outstanding capital stock. As a result, these stockholders, acting together, will have substantial influence over the outcome of matters submitted to our stockholders for approval, including the election of directors and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could delay, defer or prevent a change in control of the company, merger, consolidation, takeover or other business combination, which in turn could adversely affect the market price of our common stock.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

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

- authorize our board of directors to issue preferred stock, without further stockholder action and with voting liquidation, dividend and other rights superior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent, and limit the ability of our stockholders to call special meetings;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for director nominees;
- establish that our board of directors is divided into three classes, with directors in each class serving three-year staggered terms;
- require the approval of holders of two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or amend or repeal the provisions of our certificate of incorporation regarding the election and removal of directors and the ability of stockholders to take action by written consent or call a special meeting;
- prohibit cumulative voting in the election of directors; and
- provide that vacancies on our board of directors may be filled only by the vote of a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder. Any of the foregoing provisions could limit the price that investors might be

willing to pay in the future for shares of our common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that you would receive a premium for your common stock in an acquisition.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws or (4) any action asserting a claim governed by the internal affairs doctrine. Notwithstanding the foregoing, this choice of forum provision will not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction. Our amended and restated certificate of incorporation provides that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provision. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

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

(a) Recent Sales of Unregistered Securities

None.

(b) Use of Proceeds

None.

(c) Issuer Purchases of Equity Securities

The following table contains information relating to the repurchases of our common stock made by us in the quarter ended March 31, 2020:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as a Part of a Publicly Announced Program ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
January 1 to January 31, 2020	—	\$ —	—	\$ 75,000,000
February 1 to February 29, 2020	—	—	—	75,000,000
March 1 to March 31, 2020	147,153	34.99	147,153	69,850,586
Total	147,153	\$ 34.99	147,153	

(1) On November 29, 2018, our board of directors authorized a stock repurchase program, under which we are authorized to purchase up to an aggregate of \$75.0 million of our outstanding common stock from time to time on the open market or in privately negotiated transactions, block trades, tender offers and by any combination of the foregoing, in accordance with federal securities laws, during the two-year period ending November 29, 2020.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

The following is a list of exhibits filed as part of this Quarterly Report on Form 10-Q. Where so indicated by footnote, exhibits that were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated.

Exhibit Number	Description
<u>3.1⁽¹⁾</u>	<u>Amended and Restated Certificate of Incorporation of Alarm.com Holdings, Inc.</u>
<u>3.2⁽²⁾</u>	<u>Amended and Restated Bylaws of Alarm.com Holdings, Inc.</u>
<u>101.1*</u>	<u>Ninth Amendment to Deed of Office Lease Agreement by and between Alarm.com Incorporated and TMG TMC 3, L.L.C., dated March 12, 2020</u>
<u>31.1*</u>	<u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
<u>31.2*</u>	<u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
<u>32.1**</u>	<u>Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File - the cover page interactive data is embedded within the Inline XBRL document or included within the Exhibit 101 attachments

(1) Previously filed as Exhibit 3.1 to the registrant's Current Report on Form 8-K (File No. 001-37461), filed with the Securities and Exchange Commission on July 2, 2015, and incorporated herein by reference.

(2) Previously filed as Exhibit 3.2 to the registrant's Current Report on Form 8-K (File No. 001-37461), filed with the Securities and Exchange Commission on July 2, 2015, and incorporated herein by reference.

* Filed herewith.

** This certification is being furnished solely to accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or Securities Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

SIGNATURE

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

Alarm.com Holdings, Inc.

Date: May 7, 2020

By: /s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(On behalf of the registrant and in his capacity as Principal Financial Officer and Principal Accounting Officer)

NINTH AMENDMENT TO DEED OF OFFICE LEASE AGREEMENT

THIS NINTH AMENDMENT TO DEED OF OFFICE LEASE AGREEMENT (this "Amendment") is made this 12th day of March, 2020, by and between TMG TMC 3, L.L.C., a Delaware limited liability company ("Landlord"), and ALARM.COM INCORPORATED, a Delaware corporation ("Tenant").

RECITALS:

A. Landlord's predecessor-in-interest, Marshall Property LLC, and Tenant entered into that certain Deed of Office Lease Agreement dated August 8, 2014 (the "Original Lease"), as amended by that certain First Amendment to Deed of Office Lease Agreement dated as of May 29, 2015 (the "First Amendment"), that certain Second Amendment to Deed of Office Lease Agreement dated as of October 19, 2015 (the "Second Amendment"), that certain Third Amendment to Deed of Office Lease Agreement dated as of May 6, 2016 (the "Third Amendment"), that certain Fourth Amendment to Deed of Office Lease Agreement dated as of September 15, 2016 (the "Fourth Amendment"), that certain Fifth Amendment to Deed of Office Lease Agreement dated as of January 31, 2017 (the "Fifth Amendment"), that certain Sixth Amendment to Deed of Office Lease Agreement dated as of October 10, 2018 (the "Sixth Amendment"), that certain Seventh Amendment to Deed of Office Lease Agreement dated as of May 16, 2019 (the "Seventh Amendment"), and that certain Eighth Amendment to Deed of Office Lease Agreement dated as of July 17, 2019 (the "Eighth Amendment") (collectively, as amended, the "Lease"), whereby Tenant leases approximately 166,147 rentable square feet of office space on the first (1st), second (2nd), third (3rd), fifth (5th), seventh (7th), eighth (8th), ninth (9th), tenth (10th), and eleventh (11th) floors, (collectively, the "Existing Premises"), in a building located at 8281 Greensboro Drive, Tysons, Virginia 22102 (the "Building").

B. The Existing Premises includes approximately 6,346 rentable square feet on the third (3rd) floor, known as Suite 310 (the "Third Floor Premises") (the remainder of the Existing Premises, exclusive of the Third Floor Premises, will sometimes hereinafter be referred to as the "Remainder Premises").

C. The term of the Lease with respect to the Third Floor Premises is scheduled to expire on April 30, 2020 (the "Expiration Date").

D. Landlord desires to extend the term of the Lease with respect to the Third Floor Premises.

E. Landlord further desires to lease to Tenant and Tenant desires to lease from Landlord approximately 11,785 square feet of rentable area located on the sixth (6th) floor of the Building and known as Suite 600 (the "Fifth Expansion Premises"), which Fifth Expansion Premises are more particularly shown on Exhibit A which is attached to and made a part hereof.

F. The Existing Premises and the Fifth Expansion Premises collectively shall contain approximately 177,932 rentable square feet.

G. Landlord and Tenant desire to modify the Lease as set forth below.

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by Landlord and Tenant, Landlord and Tenant covenant and agree as follows:

1. Third Floor Premises. Notwithstanding anything herein to the contrary, Tenant acknowledges that it is currently occupying the Third Floor Premises and is leasing the Third Floor Premises in its as-in condition.

2. Fifth Expansion Premises. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Fifth Expansion Premises. The Fifth Expansion Premises has been measured in accordance with the Building Owners and Managers Association Standard Method of Measurement (ANSI/BOMA Z65.1 1996). Notwithstanding anything herein to the contrary, Tenant is leasing the Fifth Expansion Premises in its as-in condition, broom clean, with all furniture, movable fixtures, equipment, cabling and personal property removed and all base Building systems serving the Fifth Expansion Premises in good operating order and repair. Landlord shall, in good faith, use reasonable efforts to deliver the Fifth Expansion Premises to Tenant by June 1, 2020 (the "Fifth Expansion Premises Delivery Date"). In the event that Landlord fails to deliver the Fifth Expansion Premises to Tenant by June 15, 2020, then commencing on June 15th and continuing until such date that the Fifth Floor Expansion Premises is delivered to Tenant, Tenant shall receive one day of abatement of Fifth Expansion Premises Base Rent for each day of delay.

3. Term.

(a) Third Floor Premises. The term of the Lease with respect to the Third Floor Premises (the "Third Floor Premises Term") shall be extended for a period of three (3) years and three (3) months and shall commence on May 1, 2020, and expire on July 31, 2023 (the "Third Floor Premises Expiration Date").

(b) Fifth Expansion Premises. The term of the Lease with respect to the Fifth Expansion Premises (the "Fifth Expansion Premises Term") shall commence on December 1, 2020, and expire on June 30, 2026.

4. Base Annual Rent.

(a) Third Floor Premises. In addition to the "Base Rent" (as defined in the Lease) with respect to the Remainder Premises, commencing on May 1, 2020 (the "Third Floor Premises Rent Commencement Date"), Tenant covenants and agrees to pay Landlord Base Rent with respect to the Third Floor Premises (the "Third Floor Premises Base Rent") as follows:

<u>Period</u>	<u>Third Floor Premises Base Rent</u>	<u>Monthly Installments of Third Floor Premises Base Rent</u>	<u>Rent Per Rentable Square Foot</u>
5/1/20 – 4/30/21	\$263,358.96	\$21,946.58	\$41.50
5/1/21 – 4/30/22	\$270,593.40	\$22,549.45	\$42.64
5/1/22 – 4/30/23	\$278,018.28	\$23,168.19	\$43.81
5/1/23 – 7/30/23	\$285,663.78 (annualized)	\$23,805.32	\$45.01

Provided Tenant is not in Default (as defined in the Original Lease), commencing on the Third Floor Premises Rent Commencement Date, Landlord agrees to abate the first three (3) full monthly installments of Third Floor Premises Base Rent that are payable under this Amendment (i.e., equal to a total abatement of \$65,839.74).

(b) Fifth Expansion Premises. In addition to the "Base Rent" (as defined in the Original Lease) with respect to the Remainder Premises, commencing on December 1, 2020 (the "Fifth Expansion Premises Rent Commencement Date"), Tenant covenants and agrees to pay Landlord Base Rent with respect to the Fifth Expansion Premises (the "Fifth Expansion Premises Base Rent") as follows:

<u>Period</u>	<u>Fifth Expansion Premises Base Rent</u>	<u>Monthly Installments of Fifth Expansion Premises Base Rent</u>	<u>Rent Per Rentable Square Foot</u>
12/1/20 – 11/30/21	\$489,077.52	\$40,756.46	\$41.50
12/1/21 – 11/30/22	\$502,512.36	\$41,876.03	\$42.64
12/1/22 – 11/30/23	\$516,300.84	\$43,025.07	\$43.81
12/1/23 – 11/30/24	\$530,442.84	\$44,203.57	\$45.01
12/1/24 – 11/30/25	\$545,056.20	\$45,421.35	\$46.25
12/1/25 – 6/30/26	\$560,023.20 (annualized)	\$46,668.60	\$47.52

Provided Tenant is not in "Monetary Default" (as defined in the Original Lease), and is not in default of any material non-monetary provision of the Lease beyond the expiration of any applicable notice and cure period, commencing on the Fifth Expansion Premises Rent Commencement Date, Landlord agrees to abate the first five (5) full monthly installments of Fifth Expansion Premises Base Rent that are payable under this Amendment (i.e., equal to a total abatement of \$203,782.30).

5. Pro Rata Share.

(a) Third Floor Premises. In addition to paying Tenant's "Pro Rata Share" (as defined in the Lease) of increases in "Expenses" (as defined in the Lease) and "Taxes" (as defined in the Lease) with respect to the Remainder Premises, commencing on January 1, 2021, and continuing throughout the Third Floor Premises Term, Tenant shall pay its "Third Floor Premises Pro Rata Share" (as defined below) of increases in Expenses over the Expenses for the "Third Floor Premises Base Year" (as defined below) [subject to the Controllable Expenses Cap (as defined in Section 5.03.D. of the Original Lease)] and increases in Taxes over the Taxes for the Third Floor Premises Base Year in accordance with the Lease (as amended by this Amendment). As used herein, (a) "Tenant's Third Floor Premises Pro Rata Share" shall mean 2.46% (i.e., based on a Total Rentable Area of the Building of 257,824 rentable square feet), and (b) the "Third Floor Premises Base Year" for Expenses and Taxes shall mean calendar year 2020. Expenses for the Third Floor Premises Base Year shall be grossed-up, as provided in Section 5.03.C. of the Original Lease, to reflect a ninety-five percent (95%) occupancy rate for the Building. Taxes for the Third Floor Premises Base Year shall reflect actual Taxes assessed or imposed upon the Property or Landlord, as applicable, during the Third Floor Premises Base Year.

(b) Fifth Expansion Premises. In addition to paying Tenant's "Pro Rata Share" (as defined in the Lease) of increases in "Expenses" (as defined in the Lease) and "Taxes" (as defined in the Lease) with respect to the Remainder Premises, commencing on January 1, 2022, and continuing throughout the Fifth Expansion Premises Term, Tenant shall pay its "Fifth Expansion Premises Pro Rata Share" (as defined below) of increases in Expenses over the Expenses for the "Fifth Expansion Premises Base Year" (as defined below) [subject to the Controllable Expenses Cap (as defined in Section 5.03.D. of the Original Lease)] and increases in Taxes over the Taxes for the Fifth Expansion Premises Base Year in accordance with the Lease (as amended by this Amendment). As used herein, (a) "Tenant's Fifth Expansion Premises Pro Rata Share" shall mean 4.57% (i.e., based on a Total Rentable Area of the Building of 257,824 rentable square feet), and (b) the "Fifth Expansion Premises Base Year" for Expenses and Taxes shall mean calendar year 2021. Expenses for the Fifth Expansion Premises Base Year shall be grossed-up, as provided in Section 5.03.C. of the Original Lease, to reflect a ninety-five percent (95%) occupancy rate for the Building. Taxes for the Fifth Expansion Premises Base Year shall reflect actual Taxes assessed or imposed upon the Property or Landlord, as applicable, during the Fifth Expansion Premises Base Year.

6. Parking.

(a) Parking Rights. In addition to Tenant's parking rights set forth in the Lease, (x) from and after the Third Floor Premises Rent Commencement Date and continuing until the Third Floor Premises Expiration Date, Landlord shall require that the garage operator offer to Tenant seventeen (17) monthly parking contracts to park an automobile (collectively, the "Third Floor Premises Parking Rights") in the "Garage" (as defined in the Original Lease) adjacent to the Building, and (y) from and after the Fifth Expansion Premises Rent Commencement Date, Landlord shall require that the garage operator offer to Tenant an additional thirty-two (32) monthly parking contracts to park an automobile in the Garage (collectively, the "Fifth Expansion Premises Parking Rights") (the Third Floor Premises Parking Rights and Fifth Expansion Premises Parking Rights are sometimes collectively referred to as the "New Premises Parking Rights"). The New Premises Parking Rights shall (i) be unassigned, and (ii) be on a self-park or attendant parking basis (or a combination thereof), as determined by the garage operator. In addition to the New Premises Parking Rights, Tenant shall have the right to contract for the five (5) reserved parking spaces currently used by ID.ME on the second floor of the parking garage for Tenant's exclusive use during the hours of 6:00 a.m. to 8:00 p.m. Monday – Friday only (the "5 Spaces"). Notwithstanding anything to the contrary, Landlord shall have the right, from time to time, upon at least thirty (30) days prior written notice to Tenant, to relocate the 5 Spaces.

(b) Parking Fees. The monthly parking rate for the New Premises Parking Rights shall be the prevailing market rate charged from time to time by the garage operator for similar monthly parking contracts. As of the Effective Date, the current rate for each (i) unreserved parking contract is One Hundred Fifteen and 00/100 Dollars (\$115.00) per month, which rate is subject to change from time to time, and (ii) reserved space is Two Hundred Thirty and 00/100 Dollars (\$230.00) per month, which rate is subject to increase from time to time. Except as otherwise provided herein, contracts for the New Premises Parking Rights shall be with the garage operator and shall contain the same terms as are usually contained in contracts with other similar office customers of the garage operator at the Building. If Tenant fails to pay any actual charges for its New Premises Parking Rights within any applicable notice and cure period, then Landlord shall have the right to terminate Tenant's New Premises Parking Rights with respect to those spaces for which Tenant has failed to pay within any applicable notice and cure periods, without legal process, and to remove Tenant, Tenant's vehicles or those of its employees, licensees or invitees from the Garage. For purposes of clarity, if Tenant fails to timely pay for its New Premises Parking Rights, such failure shall not permit Landlord to terminate Tenant's parking rights otherwise set forth in the Lease for which Tenant is not required to pay a parking fee. Notwithstanding anything to the contrary, provided Tenant is not in Default under the Lease (as amended by this Amendment) beyond the expiration of any applicable notice and cure period, Landlord shall abate the parking fees due under this Amendment (x) for the Third Floor Premises Parking Rights, for the period commencing on the Third Floor Premises Rent Commencement Date and ending on April 30, 2021, (y) for the Fifth Expansion Premises Parking Rights, for the period commencing on the Fifth Expansion Premises Rent Commencement Date and ending on November 30, 2021, and (z) for the 5 Spaces during the first twelve (12) months that the 5 Spaces are made available for Tenant's use.

7. Termination Option. Notwithstanding anything to the contrary, Tenant's termination option contained in Section 1 of Exhibit F of the Original Lease shall not be applicable to the Third Floor Premises or the Fifth Expansion Premises.

8. Brokers. Landlord and Tenant each represents and warrants to the other that neither party has dealt with any broker in connection with this Amendment, other than CBRE, Inc. ("Landlord's Broker") and Avison Young ("Tenant's Broker"). Said brokers shall be paid a brokerage commission pursuant to a separate written agreement between Landlord and said brokers. Landlord and Tenant each shall indemnify and hold harmless the other from and against any claims for brokerage or other commission arising by reason of a breach by the indemnifying party of the aforesaid representation and warranty.

9. Definitions. From and after the Fifth Expansion Premises Delivery Date, except where the context plainly requires otherwise, (a) the term "Premises" shall mean the Existing Premises and the Fifth Expansion Premises, and (b) all references in the Lease to "Premises" shall mean the Existing Premises and the Fifth Expansion Premises. Except where the context plainly requires otherwise, all capitalized terms that are not defined in this Amendment shall have the meanings ascribed to such terms in the Lease.

10. Estoppel. To induce Landlord to enter into this Amendment, Tenant hereby represents and warrants to Landlord that as of the date of this Amendment:

- (a) Tenant is in possession of the entire Existing Premises;
- (b) Tenant has not assigned the Lease or sublet any portion of the Existing Premises;
- (c) The Lease is unmodified (except as otherwise expressly set forth to the contrary in this Amendment and is in full force and effect;
- (d) To Tenant's knowledge, Tenant has no claims against Landlord arising under or in connection with the Lease, and Tenant has no set off or defenses against the enforcement of any right or remedy of Landlord under the Lease; and
- (e) To Tenant's knowledge, Landlord is not in default of any of its obligations under the Lease and to Tenant's knowledge, no event has occurred and no condition exists which, with the giving of notice or the lapse of time, or both, will constitute a default by Landlord under the Lease.

11. Governing Documents. Except as expressly modified by this Amendment, the Lease shall remain unchanged and continue in full force in accordance with its terms. In the event of any conflict between the terms and conditions of the Lease and the terms and conditions of this Amendment, the terms and conditions of this Amendment shall govern and control.

12. Counterparts. This Amendment may be executed in two (2) or more counterpart copies, all of which counterparts shall have the same force and effect as if all parties hereto had executed a single copy of this Amendment.

13. Incorporation of Recitals. The recitals set forth above are incorporated in and made a part of this Amendment.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the day and year first above written.

WITNESS/ATTEST:

/s/ Sage Bree

LANDLORD:

TMG TMC 3 L.L.C., a Delaware limited liability company

By: /s/ Gary E. Block

Name: Gary E. Block

Title: Chief Investment Officer

/s/ Sage Bree

By: /s/ Mark D. King

Name: Mark D. King

Title: CFO/COO

WITNESS/ATTEST:

/s/ Nicola Murphy

TENANT:

ALARM.COM INCORPORATED, a Delaware corporation

By: /s/ Daniel Ramos

Name: Daniel Ramos

Title: Senior Vice President

EXHIBIT A

WORK AGREEMENT

This Exhibit is attached to and made a part of that certain Ninth Amendment to Deed of Office Lease Agreement dated as of _____, 2020 (the "Amendment"), by and between TMG TMC 3 L.L.C., a Delaware limited liability company ("Landlord"), and ALARM.COM INCORPORATED, a Delaware corporation ("Tenant"). Terms used but not defined in this Exhibit shall have the meaning ascribed to them in the "Lease" (as defined in the Amendment).

1. Tenant's Authorized Representative. Tenant designates Alex Texier ("Tenant's Authorized Representative") as the person authorized to initial all plans, drawings, change orders and approvals pursuant to this Exhibit. Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed by Tenant's Authorized Representative.

2. As-Is. Landlord is leasing the Fifth Expansion Premises to Tenant in the condition described in Section 2 of the Amendment. All of the work to be performed in initially finishing and completing the Fifth Expansion Premises shall be performed by Tenant pursuant to this Exhibit A and pursuant to all other applicable provisions of the Lease including, without limitation, insurance, damage and indemnification provisions, and such work shall be deemed to be Alterations for all purposes of the Lease.

3. Costs.

(a) Tenant shall pay all expenses incurred in connection with the "Fifth Expansion Premises Work" (as defined below) over and above the "Construction Allowance" (as defined below) as follows.

(b) Landlord shall pay to Tenant the sum of up to Seven Hundred Seven Thousand One Hundred and 00/100 Dollars (\$707,100.00) (the "Construction Allowance") (i.e., up to \$60.00 per rentable square foot contained in the Fifth Expansion Premises) as a reimbursement to Tenant for the costs of performing alterations and improvements to the Fifth Expansion Premises, including preparing design and construction documents and mechanical and electrical plans, construction management and specialty consultant fees, and hard costs (the "Fifth Expansion Premises Work"), including the cost of preparing design and construction documents and mechanical and electrical plans, and construction management and specialty consultant fees in connection with the Fifth Expansion Premises Work. Notwithstanding anything to the contrary, no more than twenty percent (20%) of the Construction Allowance may be utilized for soft costs in connection with the Fifth Expansion Premises Work (including, but not limited to, architectural and engineering services, signage, construction management and specialty consultant fees, cabling and wiring, and moving costs). Notwithstanding anything to the contrary, no more than fifteen (15%) percent of the Construction Allowance may be utilized for the costs of furniture, fixtures, and equipment. Landlord shall be entitled to receive a construction supervisory fee in the amount of one percent (1%) of the total hard costs of the Fifth Expansion Premises Work, which amount may be deducted from the amount of the Construction Allowance. In the event Tenant desires that a representative of Landlord participate in Tenant's weekly construction progress meetings, the parties shall reasonably cooperate in scheduling the meetings and Landlord shall cause its representative to participate in such meetings, which participation may be telephonic. The Construction Allowance shall be paid by Landlord to Tenant in accordance with the provisions of Section 3(c) below. Despite the foregoing, Tenant shall pay all costs of performing the Fifth Expansion Premises Work that are in excess of the Construction Allowance.

(c) Periodically (but not more often than once per calendar month), Tenant shall deliver to Landlord an invoice from contractors or materialmen who have supplied labor or materials for the Fifth Expansion Premises Work for which disbursement is then being requested. Such invoice shall contain (or be accompanied by) a certification by Tenant's architect substantially in the form of A.I.A. Document G702 "Application and Certificate for Payment" that the labor or materials for which Tenant is seeking reimbursement has been satisfactorily performed or delivered to the Fifth Expansion Premises in accordance with the "Final Construction Drawings" (as defined below). Within forty-five (45) days after receiving any such invoice (and certifications), Landlord shall pay to Tenant the amount that is set forth in such invoice; provided: (A) such request is accompanied by a copy of the invoice for such expenses marked "paid"; (B) copies of all contracts, bills, vouchers, change orders and other information relating to the expenses for which reimbursement is being sought as may be reasonably requested by Landlord shall be made available to Landlord by Tenant; (C) the work and materials for which payment is requested are performed in accordance with the working drawings approved by Landlord as evidenced by the G702 document referenced above; (D) the work for which payment is requested has been performed by a contractor approved by Landlord; (E) the work and materials for which payment is requested have been physically incorporated into the Fifth Expansion Premises, free of any security interest, lien or encumbrance; and (F) Tenant delivers to Landlord lien waivers from all contractors and materialmen for the work or materials for which such draw payment is being made (which lien waivers may be contingent only on payment of the amount then being requisitioned). Each payment made by Landlord hereunder with respect to payments to Tenant's general contractor and subcontractors shall be subject to retainage of ten percent (10%); provided, however, if Tenant's requisition request includes a ten percent (10%) retainage per its agreement with the general contractor (or the agreement with the subcontractor, as applicable), the payment shall not be subject to an additional ten percent (10%) retainage. Upon completion of the Fifth Expansion Premises Work, Tenant shall provide to Landlord (i) a valid non-residential use permit for the Fifth Expansion Premises, and (ii) a certificate of completion from Tenant's architect with respect to the Fifth Expansion Premises Work.

Landlord shall pay the retainage to Tenant within forty-five (45) days after the last to occur of the following: (A) final completion of all of the Fifth Expansion Premises Work in accordance with the terms of the Lease (as amended by the Amendment), (B) the certificate of Tenant's architect that the Fifth Expansion Premises Work has been installed in accordance with the Final Construction Drawings, (C) receipt of releases of lien from all contractors and materialmen who supplied labor or materials for the Fifth Expansion Premises Work (which lien waivers may be contingent only on payment of the amount then being requisitioned, and within twenty (20) days after Landlord makes such payment, Tenant shall obtain full, final and unconditional lien waivers), and (D) Landlord's receipt of paid invoices evidencing that Tenant has actually paid to materialmen, vendors, consultants, and contractors who have supplied materials, services, or labor for the Fifth Expansion Premises Work an amount equal to or in excess of the Construction Allowance. If the Construction Allowance is not fully utilized by the date which occurs eighteen (18) months after the Effective Date, the unused portion of the Construction Allowance shall be retained by Landlord.

(d) Notwithstanding anything to the contrary set forth herein, in the event that Landlord fails to timely make a disbursement of the Construction Allowance, and such disbursement (or portion thereof) is not subject to a legitimate good-faith dispute by Landlord, Tenant shall have the right to offset the subject disbursement of the Construction Allowance against the Rent next payable by Tenant under the Lease (after the rent abatement period set forth in the Amendment); provided, however, that Tenant first provides Landlord with an additional notice which shall set forth in bold capital letters the following statement: **"IF LANDLORD FAILS TO DISBURSE FUNDS FOR THE CONSTRUCTION ALLOWANCE WITHIN TEN (10) DAYS AFTER RECEIPT OF THIS NOTICE, THEN TENANT SHALL HAVE THE RIGHT TO OFFSET THE SUBJECT DISBURSEMENT OF THE CONSTRUCTION ALLOWANCE AGAINST RENT"** and such failure by Landlord to make such disbursement of the Construction Allowance continues for more than ten (10) days after Landlord receives such additional notice. The foregoing provision shall be deemed null and void and shall be deemed deleted from this Amendment upon the full disbursement of the Construction Allowance as provided herein. Notwithstanding anything to the contrary set forth herein, in no event however shall Tenant offset an amount more than twenty percent (20%) of the payment due to Landlord, but Tenant may carry forward any excess to apply toward future payments until fully applied. Any portion of the Construction Allowance that is offset as aforesaid is deemed to have been funded, and in all events Tenant must use the amount offset for the items to which the Construction Allowance may be applied.

4. Schedule.

(a) Tenant shall submit to Landlord a final space plan and all specifications, details, finishes (including, without limitation, paint and carpet selections), elevations and sections, all as approved by Tenant, for Landlord's written approval (which approval shall not be unreasonably withheld, conditioned or delayed with respect to any plans and specifications to the interior of the Fifth Expansion Premises (i) which do not adversely affect the mechanical, electrical, plumbing, life safety or heating, ventilation and air-conditioning system serving the Building, and (ii) which do not adversely affect the structure of the Fifth Expansion Premises or the Building). Such space plan shall indicate partition and space layout and proposed fixturing, door location, special equipment types, materials and colors, reflected ceiling plan (including lighting, materials and sprinkler heads), floor load requirements exceeding fifty (50) pounds per square foot live load, telephone and electrical outlet locations.

(b) Tenant shall submit to Landlord final architectural and engineering working drawings approved by Tenant for Landlord's written approval, such approval not to be unreasonably withheld, conditioned, or delayed. Such architectural working drawings shall include: master legend, construction and floor plan, reflected ceiling plan, telephone and electrical outlet layout and usage system, finish plan, sign, window and storefront details (if any), and all architectural details, elevations, specifications and finishes necessary to construct the Fifth Expansion Premises. Said drawings, when approved by Landlord, are referred to herein as the "Final Construction Drawings."

5. Approval. All plans and drawings (and changes thereto) shall be subject to Landlord's written approval. Landlord shall not unreasonably withhold, condition, or delay its consent to such plans and drawings. Such approval shall not constitute either (a) approval of any delay caused by Tenant or a waiver of any right or remedy that may arise as a result of such delay, or (b) Landlord's representation that such approved plans, drawings or changes comply with all applicable governmental laws, codes, orders, rules or regulations. Any deficiency in design or construction, although same had prior approval of Landlord, shall be solely the responsibility of Tenant. All materials and equipment furnished by Tenant shall be new or like-new and all work shall be done in a good and workmanlike manner. Notwithstanding anything herein to the contrary, any alterations or improvements which connect into the "Base Building Systems" (as defined in the Lease), or which are made to the exterior of the Fifth Expansion Premises or the Building, or which are visible from the exterior of the Fifth Expansion Premises or the Building shall be subject to Landlord's prior written approval, in its sole and absolute discretion. Further, to the extent that Landlord does not have a third party review the plans and drawings (or changes thereof) provided by Tenant in connection with the Fifth Expansion Premises Work, Landlord shall advise Tenant within seven (7) business days after receiving any request for such approval (including receipt of hard copies of such reasonable plans and drawings) whether or not Landlord approves such plans and drawings (or changes thereof) (or if disapproval, the specific reasons for such disapproval). If Landlord does hire a third party to review any such plans and drawings (or changes thereto), then the time period for reviewing such plans and drawings (or changes thereto) shall be extended from seven (7) business days to ten (10) business days. In the event Tenant is required to resubmit plans or drawings (or changes thereto) for approval, Landlord shall respond to such resubmitted plans and drawings (or changes thereto) within five (5) business days after Tenant's submission of a complete set of hard copies of such plans and drawings. If Landlord fails to respond to a submission of plans and drawings (or changes thereto) within the time frames set forth above, and Landlord also fails to respond to Tenant within three (3) business days after Landlord's receipt of a second written request for Landlord's approval (which second request states in bold

capital letters that the request will be deemed approved if Landlord fails to respond within the three (3) business day period) then, Landlord shall be deemed to have approved the same as submitted, however such "deemed approval" concept shall not apply with respect to improvements affecting the base Building structure or the Base Building Systems.

6. Change Orders. All additional expenses attributable to any change order requested by Tenant and approved by Landlord, shall to the extent that it would cause the total construction costs to exceed the Construction Allowance, be payable by Tenant.

7. General Requirements.

(a) Tenant construction shall proceed only on the basis of approved drawings. Changes that occur during actual construction that differ from the approved drawings will require alterations at Tenant's expense to restore compliance with approved drawings, unless otherwise approved by Landlord, such approval not to be unreasonably withheld, conditioned, or delayed. No drawings are considered "approved" unless they bear Landlord's signature of approval.

(b) Landlord shall have no obligation or responsibility to Tenant in respect of minor deviations in the actual dimensions of the Fifth Expansion Premises. Tenant shall have the affirmative obligation to conduct an on-site verification of all measurements and dimensions prior to letting any contracts for the performance of the Fifth Expansion Premises Work and prior to ordering the fabrication of any trade fixtures.

(c) Following Landlord's approval of the Final Construction Drawings, but prior to commencement of construction of the Fifth Expansion Premises Work, Tenant shall submit the following:

1. Names of all contractors and subcontractors (all of which shall be subject to Landlord's approval);
2. Proof of financial ability;
3. Tenant insurance coverage;
4. Copy of building permit(s);
5. The then-current completion schedule from Tenant's general contractor; and
6. Proof of utility application/deposit to Landlord.

8. Performance of Fifth Expansion Premises Work. Tenant will perform and complete the Fifth Expansion Premises Work in compliance with such reasonable rules and regulations as Landlord may make.

9. Completion of Fifth Expansion Premises Work. Promptly following completion of the Fifth Expansion Premises Work, Tenant, at its sole cost and expense and without cost to Landlord shall:

(a) Furnish evidence satisfactory to Landlord that all of the Fifth Expansion Premises Work has been completed and paid for in full, that any and all liens therefor that have been or might be filed have been discharged of record (by payment, bond, order of a court of competent jurisdiction or otherwise) or waived;

(b) Furnish to Landlord all certifications and approvals with respect to the Fifth Expansion Premises Work that may be required from any governmental authority and any board of fire underwriters or similar body for the use and occupancy of the Fifth Expansion Premises;

(c) Furnish Landlord with one (1) set of reproducible "as built" drawings of the Fifth Expansion Premises; and

(d) Furnish an affidavit from Tenant's architect certifying that all work performed in the Fifth Expansion Premises is in accordance with the working drawings and specifications approved by Landlord.

10. Work Standards. All of the Fifth Expansion Premises Work shall be done and installed in compliance with all applicable laws and with the overall design and construction standards of the Building. Landlord's approval of the Final Construction Drawings shall evidence Landlord's agreement that the Fifth Expansion Premises Work is in line with the overall design and construction standards of the Building, provided that Fifth Expansion Premises Work is completed in compliance with the Final Construction Drawings.

11. Permits. As expeditiously as reasonably possible, Tenant shall file all applications, plans and specifications, pay all fees and obtain all permits, certificates and other approvals required by the jurisdiction in which the Building is located and any other authorities having jurisdiction in connection with the commencement and completion of the Fifth Expansion Premises Work, and diligently and in good faith pursue same so that all permits and approvals are issued as soon as reasonably practicable. If minor modifications are at any time required by government authorities to any such plans or specifications, then Tenant shall make such modifications. Tenant shall permit Landlord to assist Tenant in obtaining all such permits and other items. Tenant shall obtain a valid non-residential use permit (or certificate of occupancy) for the Fifth Expansion Premises and all other approvals required for Tenant to use and occupy the Fifth Expansion Premises and to open for business to the public. Copies of all building permits/occupancy permits are to be forwarded to Landlord. The Construction Allowance may be used by Tenant to comply with requirements of this Section 11.

12. Contractor Insurance. Tenant's general contractor shall be required to provide the following types of insurance:

(a) Builder's Risk Insurance. At all times during the period between the commencement of construction of the Fifth Expansion Premises Work and the date on which Tenant opens the Fifth Expansion Premises for business with the public with a valid certificate of occupancy in place, Tenant shall maintain, or cause to be maintained, casualty insurance in Builder's Risk Form covering Landlord, Landlord's architects, Landlord's contractor or subcontractors, Tenant and Tenant's contractors, as their interest may appear, against loss or damage by fire, vandalism, and malicious mischief and other such risks as are customarily covered by the so-called "broad form extended coverage endorsement" upon all Fifth Expansion Premises Work in place and all materials stored at the site of the Fifth Expansion Premises Work, and all materials, equipment, supplies and temporary structures of all kinds incident to the Fifth Expansion Premises Work and builder's machinery, tools and equipment, all while forming a part of, or on the Fifth Expansion Premises, or when adjacent thereto, while on drives, sidewalks, streets or alleys, all on a completed value basis for the full insurable value at all times. Said Builder's Risk Insurance shall contain an express waiver of any right of subrogation by the insurer against Landlord, its agents, employees and contractors.

(b) Worker's Compensation. At all times during the period of construction of the Fifth Expansion Premises Work, in addition to the insurance requirements under Section 15(c) of the Original Lease, Tenant's contractors and subcontractors shall maintain in effect statutory worker's compensation as required by the jurisdiction in which the Building is located.

Notwithstanding anything to the contrary, the provisions of this Section 12 shall be applicable to the making of any Alterations to the Existing Premises and/or the Fifth Expansion Premises.

13. Contractor Liability. Tenant assumes the responsibility and liability for any and all injuries or death of any or all persons, including Tenant's contractors and subcontractors, and their respective employees, and for any and all damages to property caused by, or resulting from or arising out of any act or omission on the part of Tenant in connection with the Fifth Expansion Premises Work. Tenant's contractors or subcontractors, in the prosecution of the Fifth Expansion Premises Work, and with respect to such work, agree to indemnify and save free and harmless Landlord from and against all losses and/or expenses, including reasonable legal fees and expenses which they may suffer or pay as the result of claims or lawsuits due to, because of, or arising out of any and all such injuries or death and/or damage, whether real or alleged; and Tenant and Tenant's contractors and/or subcontractors or their respective insurance companies shall assume and defend at their own expense all such claims or lawsuits. Tenant agrees to insure this assumed liability in its policy of Broad Form Commercial General Liability insurance and the certificate of insurance or copy of the policy that Tenant will present to Landlord shall so indicate such contractual coverage.

14. Coordination. The Fifth Expansion Premises Work shall be coordinated with any other work being performed by Landlord and other tenants in the Building so that the Fifth Expansion Premises Work will not unreasonably interfere with or delay the completion of any other construction work in the Building.

15. Loads. No item shall be mounted on or hung from the interior or exterior of the Building by Tenant without Landlord's prior written approval, such approval not to be unreasonably withheld, conditioned, or delayed if mounted inside the Fifth Expansion Premises. If Tenant desires to mount or hang anything, Tenant shall notify Landlord of the loads involved and shall pay all costs involved (subject to application of the Construction Allowance as permitted by this Exhibit B).

16. Ducts. Tenant shall permit Landlord or its agent to install, maintain, repair and replace in the ceiling space and/or under the concrete slab, adjacent to demising partitions and free standing columns, electrical, water or other lines and/or ducts that may be required to serve the common areas or others in the Building.

17. Contractor Responsibilities. As between Landlord and Tenant, it shall be Tenant's responsibility to cause each of Tenant's contractors and subcontractors to:

(a) Maintain continuous protection of any premises adjacent to the Fifth Expansion Premises in such a manner (including the use of lights, guardrails, barricades and dust-proof partitions where required) as to prevent any damage to the Building or any adjacent premises by reason of the performance of the Fifth Expansion Premises Work.

(b) Secure all parts of the Fifth Expansion Premises Work against accident, storm, and any other hazard. However, no barricades or other protective device shall extend more than two (2) feet beyond the Fifth Expansion Premises. In addition to the foregoing, Tenant's barricade or other protective device, if any, shall be attractive in appearance, shall extend across the frontage and full height of the Fifth Expansion Premises and shall be of materials approved by Landlord, such approval not to be unreasonably withheld, conditioned, or delayed.

(c) Comply strictly with the Rules and Regulations and Procedures set forth in Exhibit A Schedule I, and Tenant agrees to be responsible for any violations thereof. Remove and dispose of, at Tenant's sole cost and expense, at least daily and more frequently as Landlord may reasonably direct, all debris and rubbish caused by or resulting from the Fifth Expansion Premises Work, and upon completion, to remove all temporary structures, surplus materials, debris and rubbish of whatever kind remaining on any part of the Building or in proximity thereto which was brought in or created in the performance of the Fifth Expansion Premises Work (including stocking refuse). If at any time Tenant's contractors and subcontractors shall neglect, refuse or fail to remove any debris, rubbish, surplus materials, or temporary structures in accordance with this paragraph, Landlord at its sole option may remove the same at Tenant's expense without prior notice.

(d) Use only the Fifth Expansion Premises for the performance of the Fifth Expansion Premises Work. Entry into areas unrelated to the performance of the Fifth Expansion Premises Work is prohibited.

(e) Warrants that the work done by it will be free from any defects in workmanship and materials for a period of not less than one (1) year from the date of completion thereof, except for those inherent in the quality of the Fifth Expansion Premises Work that the Final Construction Drawings require or permit. Tenant shall also require that any such contractors and subcontractors shall be responsible for the replacement or repair without charge for any and all work done or furnished by or through such contractors or subcontractors which becomes defective within one (1) year after completion; provided, however, Tenant shall not be in default if Tenant elects to perform the required replacement or repair. The contractor's warranty may exclude remedy for damage or defect caused by abuse, alterations to the Fifth Expansion Premises Work not executed by the contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. Replacement or repair of such work shall include, without charge, all expenses and damages in connection with such removal, replacement, or repair of all or any part of such work, or any part of the Building which may have been damaged or disturbed thereby. All warranties or guarantees in connection with the Fifth Expansion Premises Work (to the extent such warranties or guarantees are for items which are to remain the property of Landlord following the expiration of the term of the Lease or earlier termination of the Lease) shall be contained in the contract or subcontract, which shall provide that said guarantees or warranties either shall be issued in the name of Tenant and Landlord, or shall be transferable to Tenant and Landlord. Tenant covenants to give to Landlord any commercially reasonable assignment or other assurance necessary to provide a right of direct enforcement.

EXHIBIT "A"

SCHEDULE I

The following are rules and procedures to be followed by contractors when working in or around the Fifth Expansion Premises or Building:

1. Provide a trash can with a lid to dispose of lunches and food. Trash must not be allowed to accrue in the open lease spaces. This is to avoid fire and rodent hazards.
2. Access into spaces under construction must be limited to one door. If an unfinished lease space has two doors, one must be locked. Passage can occur through the door most convenient to the freight elevator and should have a temporary foot mat.
3. No access to the Building's interior lobby or corridors will be permitted at any time.
4. All unused entry doors to vacant areas must be closed at all times and locked.
5. Construction employees must conduct themselves as mature gentlemen and ladies when working in tenant occupied spaces and all public spaces.
6. Loud radios are prohibited in all work areas.
7. Noisy operations such as chopping, etc. are to be done after hours, unless prior consent is given.
8. All work performed outside of normal working hours must be coordinated with the Building manager for security reasons. No one will be allowed access without prior permission.
9. Every effort must be made to avoid unreasonable disturbance of any other tenant's normal business operations. Punch list corrections must be performed only with the Tenant's permission, in advance. If an operation underway is unreasonably disturbing a tenant of the Building, it must be discontinued immediately and performed outside of normal business hours.

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Stephen Trundle, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alarm.com Holdings, 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.

Date: May 7, 2020

/s/ Stephen Trundle

Stephen Trundle

President and Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Steve Valenzuela, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alarm.com Holdings, 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.

Date: May 7, 2020

/s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

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

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Stephen Trundle, President and Chief Executive Officer of Alarm.com Holdings, Inc. (the "Company") and Steve Valenzuela, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

- (1) The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2020, to which this Certification is attached as Exhibit 32.1 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and
- (2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 7th day of May, 2020.

/s/ Stephen Trundle

Stephen Trundle

President and Chief Executive Officer

(Principal Executive Officer)

/s/ Steve Valenzuela

Steve Valenzuela

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Alarm.com Holdings, 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 the Form 10-Q), irrespective of any general incorporation language contained in such filing.