

CONTROL4 CORP  
Form 10-K  
February 15, 2018  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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FORM 10 K

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(Mark One)

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

For the fiscal year ended December 31, 2017

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 36017

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Control4 Corporation

(Exact name of registrant as specified in its charter)

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Delaware	42 1583209
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
11734 S. Election Road	
Salt Lake City, Utah	84020
(Address of principal executive offices)	(Zip Code)

(801) 523 3100

(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	The NASDAQ Stock Market LLC

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

None

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Indicate by check mark if the registrant is a well known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10 K or any amendment to this Form 10 K.

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 filerSmaller reporting company Emerging growth company  
(Do not check if a smaller reporting company)

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

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

The aggregate market value of voting and non voting common equity held by non affiliates of the registrant as of June 30, 2017 was approximately \$484.3 million (based on a closing sale price of \$19.61 per share as reported for the NASDAQ Global Select Market on June 30, 2017). For purposes of this calculation, shares of common stock held by officers, directors and their affiliated holders and shares of common stock held by persons who hold more than 10% of the outstanding common stock of the registrant have been excluded from this calculation because such persons may be deemed to be affiliates. This determination of executive officer or affiliate status is not necessarily a conclusive determination for other purposes.

As of February 9, 2018, 25,833,471 shares of the registrant's Common Stock, \$0.0001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2018 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10 K where indicated. Such Proxy Statement will be filed with the U.S. Securities and Exchange Commission ("SEC") within 120 days after the end of the fiscal year to which this report relates.

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Control4 Corporation

Form 10-K

For Fiscal Year Ended December 31, 2017

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Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K (“Form 10-K” or “Annual Report”) contains “forward-looking statements” that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact contained in this Form 10-K are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such forward-looking statements include any expectation of earnings, revenues or other financial items including without limitation statements about the accretive effect of any acquisitions; any statements of the plans, strategies and objectives of management for future operations or growth; factors that may affect our operating results; statements related to adding employees; statements related to future capital expenditures; statements related to future economic conditions or performance; statements related to product or service adoption and network expansion; statements as to industry trends or market opportunities and other matters that do not relate strictly to historical facts or statements of assumptions underlying any of the foregoing. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “could,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “intends” or the negative of these terms or other comparable terminology. We caution investors that any forward-looking statements are made as of the date they were first issued and are based on management’s beliefs, expectations, and on assumptions made by, and information currently available to, management. Forward-looking statements are subject to risks, assumptions and uncertainties, many of which involve factors or circumstances that are beyond Control4’s control. Control4’s actual results could differ materially from those stated or implied in forward-looking statements due to a number of factors, including but not limited to, those discussed in the section titled “Risk Factors” included in this Form 10-K, as well as other documents that may be filed by the Company from time to time with the SEC. Control4 urges investors to consider these factors carefully in evaluating the forward-looking statements contained in this Form 10-K and not to give any such forward-looking statement any undue reliance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for management to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. The forward-looking statements included in this Form 10-K represent Control4’s views as of the date of this Form 10-K, and the Company anticipates that subsequent events and developments will cause its views to change. Control4 undertakes no intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

References in this Form 10-K to the “Company,” “Control4,” “we,” “us,” and “our” refer to Control4 Corporation and, where appropriate, its subsidiaries, unless otherwise stated.

"Control4," "Pakedge," "Triad," and other trademarks of ours appearing in this report are our property. This report contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.



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PART I.

ITEM 1. Business

Overview

Control4 is a leading provider of smart home and business solutions that are designed to personalize and enhance how consumers engage with an ever-changing connected world. Our entertainment, smart lighting, comfort and convenience, safety and security, and networking solutions unlock the potential of connected devices, making entertainment systems easier to use and more accessible, homes and businesses more comfortable and energy efficient, and individuals more connected and secure. Our premium smart home and small business solutions provide consumers with the ability to integrate audio, video, lighting, temperature, security, communications, network management and other functionalities into a unified automation solution, customized to match their lifestyles and business needs. Our advanced software, delivered through our controller and user-interface products together with various cloud services power this customized experience, enabling cohesive interoperability with thousands of connected Control4 and third-party devices.

Consumer need for simplicity and a personalized experience, combined with advances in technology, are driving rapid growth in the connected home market. As the “Internet of Things” shapes the way we live and work, consumers are looking for affordable ways to extend and enhance the interoperability of connected devices in their homes and businesses, driving growth in the mainstream automation market.

We were founded in 2003 to deliver a premium home automation solution by enabling consumers to unify their connected devices into a personalized system. We strive to create solutions that enable customers to purchase our products at an accessible and affordable entry point, while offering flexibility to expand to include additional devices, services and features optimized for every type of project, from a single-room all the way to a luxurious, fully-integrated whole-home experience. We believe that our solution is a leader in the mainstream home automation market by providing integrated and scalable control of over 11,000 third-party devices and services. These devices and services span a broad range of product categories including audio, video, lighting, temperature, security, communications, network management and cloud services. Our platform capabilities provide consumers with solutions that are comprehensive, personalized, flexible, affordable, and easy to use and manage.

Based on our analysis, we estimate that we have automated more than 329,000 homes and businesses representing cumulative sales of more than 665,000 of our controllers, which include our automation software. We sell and deliver our solutions through our worldwide network of over 5,290 active direct dealers and 50 distributors and have solutions installed in 101 countries. In 2017, our top 100 dealers represented 18% of our total revenue and our top 10 dealers represented 4% of our total revenue.

We generated revenue of \$244.7 million, \$208.8 million and \$163.2 million in 2017, 2016 and 2015, respectively. We had net income of \$16.0 million and \$13.0 million in 2017 and 2016, respectively, and a net loss of \$1.7 million in 2015.

## Our Industry

Within the last decade, the pace of innovation in the electronics industry has accelerated rapidly. Network-aware devices—such as televisions, smartphones, tablets, thermostats, audio systems, lighting, blinds, security systems, cameras, video doorbell stations and other appliances form the basis for the “connected controllable home.” Home automation technology integrates network aware and enabled devices in the connected home, unlocking the collective potential of these devices to work together to improve consumers’ lives, and with proliferation of connectable devices, we believe that the appeal of integrated home automation will continue to expand to a broadening base of consumers.

Whole-home or business automation solutions unify the control of audio, video, lighting, temperature, security, communications and other devices in the connected home or business to provide consumers with improved convenience, comfort, energy efficiency and security. The key functional elements of home or business automation include:

- **Control.** Controlling devices is the most basic capability of home automation solutions. From a single interface, consumers can operate a wide array of devices using wired or wireless connections. With the growth in smartphones and tablets, control functionality is increasingly extended to these mobile devices;

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- Automation. After initial programming, automation enables devices to function without additional human intervention. Automation also enables various devices to work in concert to perform more complex tasks and to take actions based on external conditions;
- Personalization. Personalization enables home automation solutions to be tailored to the unique lifestyle requirements of individual consumers and their families. Personalization unlocks the full potential of home automation to enhance, enrich and simplify the lives of consumers; and
- Connectivity. An advanced networking system with the ability to provide reliable, scalable services for audio and video distribution and cloud-based management services for both the monitoring and repair of wireless and wired automation solutions, provides a foundational layer for home automation.

We believe new technology will continue to enhance the automation experience through artificial intelligence, identity recognition, presence and location awareness and advancements in voice control.

## Our Solution

The Control4 solution, built around our advanced software platform and utilizing our network management devices and cloud services functions as the operating system of the home, integrating audio, video, lighting, temperature, security, communications and other devices into a unified automation solution that enhances our consumers' lives. We unlock the potential of connected devices, making entertainment systems easier to use, homes more comfortable and energy efficient, and families more secure.

The Control4 solution integrates our own devices and thousands of third-party devices and systems into a unified, easy-to-use solution for mainstream consumers. As a result, our solution provides the consumer with the following benefits:

- Easy to Use. Our solution is designed to be simple and intuitive. Through our unified software platform, consumers can easily interact with their entire automated home without needing to learn how to use multiple interfaces or numerous remote controls. We have designed our solution so that anyone, from a young child to a grandparent, can pick up a Control4 remote or other interface device (including a smartphone or tablet with Control4's app), and with a few intuitive clicks, watch a movie;
- Broad Device Interoperability. Our open and flexible platform provides consumers with access to a broad universe of third-party devices that become connected and interoperable through our solution. Our platform is currently interoperable with over 11,000 third-party devices, and we continually add additional integration with new devices in order to ensure that Control4 is able to integrate with the typical home's connectable and controllable devices;

- **Advanced Personalization.** Our adaptable solution enables our consumers to personalize the features and functionality of their Control4 system. Using “When >> Then” automation, consumers can personalize their automation system through homeowner directed programming. Our modular design also enables the smooth integration of new third-party products to meet the evolving needs of our consumers as their lifestyles change;
- **Attractive Entry Point.** In February 2018, we released our new CA-1 controller which is designed for entry-level projects for homeowners interested in lighting, temperature control and security, and retails for \$350 (excluding installation costs). This supplements our Entertainment and Automation series of controllers, or the EA Series, which includes the entry-level EA-1 controller at a reduced price point for entry-level consumers wanting to start with a single room multi-media automation experience of approximately \$500 (excluding installation costs). Projects can then scale in sophistication and scope from a single room to a fully-integrated whole-home experience. We have also introduced entry-level solutions in networking with the release of the WR-1 router, and audio with the introduction of the award-winning Triad One streaming amplifier;
- **Professional Installation and Support.** As the number and types of connected devices continues to grow, the need for local professional consultation, installation and support is essential for a successful home automation experience. We have built a global network of over 5,290 active certified independent dealers. Independent dealers certified on our full range of products receive in-depth training and on-going education and support, enabling them to help consumers develop and install their personalized home automation experiences. To further

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increase consumer satisfaction, we also maintain a small Customer Advocacy & Care Group that works directly with consumers to understand unresolved questions and concerns and coordinate with their dealer to reach a resolution;

- Cloud Services. We have built a secure infrastructure to provide an array of cloud-based services to enhance the homeowner and dealer experience, which include remote customer system access and control, remote dealer management capabilities and voice control; and,
- Scalability. Our solution provides customers with the ability to extend and enhance the automation capabilities of their system as their needs evolve. Customers who initially purchase an entry level, one-room solution could later build a comprehensive home automation system. The extensibility of the system empowers customers to invest in solutions that fit their current needs.

## Our Strategy

Our primary goal is to be the leading provider of comprehensive home automation solutions that provide a premium experience for our customers. We believe we differentiate ourselves through our operating system which orchestrates the thousands of devices consumers choose to install in their homes. The following are key elements of our growth strategy:

- Product Innovation. We strive to continuously develop new innovative hardware and software products for our customers. We believe that our success to-date has been largely driven by our software platform's ability to deliver personalized solutions for the end consumer. In 2017, we released Control4 OS 2.10, featuring expanded music service integrations with iHeartRadio, Sirius XM, and Spotify supported by our EA Controllers. In addition, we released an updated version of 4Sight which includes a new homeowner customization functionality called "When >> Then" automation;
- Channel Expansion. We have developed a global network of over 5,290 active, independent, authorized direct dealers and 50 distributors to sell, install and support our solutions. We intend to continue to expand and optimize our dealer and distributor network to ensure that we have sufficient geographic coverage across both existing and new markets. We will also continue to devote significant resources to increase the productivity and competency of our dealers and distributors by providing them with ongoing training, tools and support. For example, in 2017 we launched the Packedge Certified Network Administrator (PCNA) hands-on and online training program to provide dealers and technicians the networking knowledge they need to design, install, and manage wired and wireless IP networks;
- Enhanced Services. In addition to automating devices within the home, our solution also enables a wide variety of service and application opportunities. We plan to continue to enhance our cloud-based services which provide consumers with remote home monitoring, support and control capabilities from any Internet-connected mobile device or computer. We also recently acquired the intellectual property and key operating assets of ihiji, Inc. ("ihiji"), a leading provider of remote management services for technical integrators servicing connected home customers. By

offering BakPak, Control4's network management solution, and combining it with ihiji's invasion device monitoring and management solution in the future, Control4 can provide robust cloud-based services to our dealers to securely and efficiently monitor end-customer systems, which we intend to continue to develop and integrate. In addition, we recently integrated the latest release of our BakPak management software on the entry-level Pakedge RK-1 Router enabling our independent dealer network to offer more homeowners the benefits of a monitored, intelligent home network;

- **Licensing Opportunities.** We continue to make our technology available to third parties through licensing agreements. We make our device auto-discovery technology, Simple Device Discovery Protocol ("SDDP"), available on a royalty-free basis to third parties to streamline and automate the setup, identification and configuration of their devices into our system. For example, in the past year, both LG and Samsung announced the incorporation of SDDP software in their products to simplify integration with Control4 installations. As of December 31, 2017, 270 third parties had licensed SDDP from us, representing 2,900 SDDP enabled devices. We also plan to expand our licensing activities to leverage third-party distribution channels, grow our partner relationships through our integration certification program for third-party products, simplify the home automation experience for dealers and consumers, and increase interoperability; and

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- Strategic Acquisitions. As the operating system of the connected home, we believe we are ideally positioned to identify, acquire and integrate strategic acquisitions that are complementary to our current offerings, strengthen and expand our technology foundation, enhance our market positioning, distribution channels and sales, and are consistent with our overall growth strategy. For example, over the last few years we have acquired companies such as Pakedge Device & Software, Inc. (“Pakedge”), a leading and award winning developer and manufacturer of networking products, power distribution and management solutions, as well as cloud network-managed services for both wireless and wired networking solutions in the connected home and business; and Nexus Technologies Pty, Ltd. (“Nexus”), a leading distributed audio/video provider.

## Our Products and Services

The primary benefits we provide consumers and dealers lie in the value and competitive differentiation of our software platform in our integrated solution. We deliver value and differentiation to consumers and generate revenue by embedding our software into a range of physical products.

## Software Platform

At the center of the Control4 product line is the Control4 Home Operating System, which we refer to as the C4 OS, and the associated application software and software development kits, or SDKs. The high-level software components include:

- Director. Director is a real-time, extensible home operating system that runs on our controllers. It is responsible for monitoring and receiving events from numerous devices and services, processing those events according to consumer personalization settings, and then dispatching commands to the appropriate devices to perform predefined actions;
- User Interface Application. The user interface for our Control4 Operating System displays intuitive and rich graphical user interfaces on televisions, in-wall and table-top touch panels, smartphones and tablets, as well as list-based devices such as remote controls with LCD text-displays;
- Composer. Composer is a software application that enables trained and certified independent Control4 dealers and installers to design, configure and personalize a Control4 home automation system for consumers. Composer “Home Edition” enables consumers to view and configure certain features of their dealer installed and Control4 managed devices;
- Control4 Drivers. Control4 creates drivers for all of our internal hardware, and also provides Driverworks SDK (software development kit) to third parties in order to enable dealers, programmers and device manufacturers to

independently develop and test custom two-way interface drivers to support the integration of a new device or device model into our system, or to customize and enhance an existing driver. DriverWorks SDK has enabled 11,000 different products and services to be incorporated into the Control4 ecosystem;

- I/O Servers. We maintain dedicated IP servers, Zigbee servers, and Z-Wave servers allowing connected homes to communicate with devices on various types of wireless standards; and,
- Cloud-Based Services and Tools. 4Sight is our subscription service that enables end customers to remotely access, monitor and adjust settings in their homes (such as lights, temperature settings, door locks, gates and cameras), receive event-based email alerts from their system. 4Sight also enables voice control of the Control4 system through Amazon Alexa and allows consumers to personalize their automation experience through simple homeowner directed programming, referred to as “When >> Then” automation. BakPak is a customer account management system for dealers, enabling rapid remote diagnostics and response to customer connectivity issues, proactive device management, and greater visibility of networks and automation systems within each connected home.

#### Products with Embedded Software

Our products leverage our software platform to provide consumers with a comprehensive and easy-to-use connected home experience. We designed our software platform to be extensible, which has allowed us to improve and augment the functionality of hardware products (both those designed by us and by others) over time. We also design and manufacture our

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products via contract manufacturers as well as certify partner products for sale through our dealers. Our products and services include:

- **Controllers.** Our controllers run our Director software to monitor, process and automate events, statuses and actions for numerous devices and services, creating a comprehensive connected home experience. Currently we offer three Entertainment and Automation series controllers: (1) the EA-1 is designed for a single-room audio/video entertainment automation, such as a family-room, home-theater, a study, or bedroom; (2) the EA-3 is designed to integrate and control automation in small-to-mid-sized homes; and (3) the EA-5 is designed to integrate and control automation in large homes and estates. In addition, we recently released the CA-1 controller designed for entry-level projects for homeowners interested in lighting, temperature control and security. Controllers are the hub of our systems and represented 26% of our total revenue in 2017.
- **Interface Devices.** We offer touch panels, handheld remote controls and keypads as interface devices. We also develop and deliver software applications for Apple iOS and Android smartphones and tablets that enable these personal devices to become control interfaces to Control4 connected homes, both on-premises and remotely.
- **Networking Devices.** We offer advanced networking products with a range of routers, switches, wireless access points, power control, and management solutions for the connected home and business.
- **Audio Solutions.** Our EA series controllers offer high-resolution audio with bit depth up to 24bit and sample rates up to 192kHz. In addition, we offer audio distribution and amplification products that scale from single room systems to whole home distributed audio systems. We offer 4-zone and 8-zone power amplifiers, 4x4 and 8x8 matrix amplifiers, a 16x16 audio matrix switch, and a single-zone wireless amplifier for retrofit installations. In addition, through our Triad brand, Control4 offers a comprehensive range of high-quality, customizable speakers designed for home theaters, family rooms, whole-home or multi-room audio, as well as for outdoor environments. Consumers are able to listen to their personal music library as well as streaming music services via our music streamer, which is built into our controllers. Consumers can also enjoy music available on their smartphone, tablet or computer by wirelessly streaming their selection to their home audio system using AirPlay, DLNA or Bluetooth technologies.
- **Video Solutions.** We offer a broad line of video matrix switches ranging from 6x6 to 10x10, which includes HDMI as well as HDBaseT switches that are capable of distributing HD video images up to 100 meters over cat5/6e cable. This product line also includes a variety of additional extender kits, mounting kits, and various packages for broad flexibility in offering systems that allow customers to watch what they want, when and where they want to watch it.
- **Lighting Products.** We offer a suite of lighting products that provide personalized control and energy management. Our suite of wireless light switches, dimmers and keypads can revitalize an existing home or complement new home construction. We offer innovative in-wall wireless switches and dimmers for 120V, 240V and 277V electrical loads, which meet the requirements of North America, Europe, Asia and many other international markets. We also offer centralized, wired lighting systems, where all of the lighting control can be managed on a remote panel. In addition to providing lighting control, our keypads can be programmed to operate other systems in the home, such as a lighting scene or audio control.

- Comfort Products. Our wireless multi-stage thermostat, jointly developed with climate control specialist Aprilaire, is completely programmable, allowing the homeowner to create schedules that fit their lifestyle, comfort and economical needs. Through the Control4 operating system, we also integrate with third-party comfort products (such as automated blinds and pool controls) that provide additional energy savings, convenience and efficiency.
- Security Products. We offer video doorbell station products that allow our customers to see who is at the door from their network-enabled smartphone, tablet or Control4 interface. In addition, we distribute certified third-party products, including IP cameras, NVRs, deadbolts, motion sensors, garage access systems and water leak detection systems, from our security partners such as Baldwin, Lilin, Nyce, Kwikset and Yale. We also integrate with the top security panel manufacturers such as DSC, Honeywell and Interlogix, including network video recorder products and surveillance cameras sold by five of the top security monitoring manufacturers.

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- Communication Products. We offer full motion video and high-quality audio intercom capability through our in-wall and tabletop touchscreens, as well as our exterior weather-resistant video doorbell stations.

## Our Distribution Network

We offer our products exclusively through a network of independent dealers that professionally install our products. In 2005, we started selling our solutions through a network of around 450 independent dealers. Since that time, our distribution network has grown to over 5,290 active direct dealers and 50 distributors in 101 countries. Our direct independent dealer network is comprised of 4,220 dealers offering our full range of products and 1,070 dealers selling only the Pakedge and Triad line of products. Our distributors are comprised of 33 distributors offering our full range of products and 17 distributors offering only Pakedge and Triad line of products. Dealers range in size from small family businesses to large enterprises.

Our dealers are independent home automation and networking specialists that have significant experience in designing, installing and servicing both low- and high-voltage systems including music, video, security, networking, communications and temperature control. Every authorized dealer of our full line of products has gone through extensive training and has passed the necessary certification tests—either in one of our training facilities located in the United States, the United Kingdom, Germany, Australia, China, or India or in a training facility operated by one of our 33 distributors. In order to become certified to sell and install our full line of solutions, every installer for each dealer must complete course work and pass pre-training examinations, as well as pass rigorous testing at the conclusion of the multi-day formal training.

We sell directly through dealers in the United States, Canada, the United Kingdom, Australia, China, Germany and 50 other countries. We partner with 50 distributors to serve 45 additional countries. Together, our independent dealer network and our distributors allow us to service 101 countries. Our distributors recruit, train and manage dealers within their region and also help dealers find country-specific solutions for unique needs based on the special home automation market characteristics within each country. In recent years, we have moved more toward a dealer-direct model in specific international regions, and we have added, and continue to add, sales and support staff in the United Kingdom, China, India, Australia and Germany.

During the years ended December 31, 2017, 2016 and 2015, respectively, none of our dealers or distributors accounted for more than 5% of our revenue. None of our dealers or distributors have minimum or long-term purchase obligations. Dealer orders are typically placed on a project-by-project basis. As such, our dealers do not typically carry significant levels of inventory. The resulting just-in-time model helps reduce dealer inventory investment. Our dealers around the world are each responsible for local marketing, selling, installing and servicing our solution for the consumer.

## Our Partners

The home automation market is made up of a collection of thousands of electronically controllable products made by hundreds of key manufacturers. We believe that our success has come, in part, due to our ability to establish relationships with many of these manufacturers. As of December 31, 2017, approximately 100 separate manufacturers had formally submitted over 2,300 devices to us for Control4 certification so that our worldwide dealer and distributor network can be assured that these third-party devices work uniformly with our platform.

Third-party manufacturers are currently selling over 1,130 different products representing 33 brands (including brands such as Denon, Sony and Yale) through our online store. Our online store provides manufacturers valuable reach into our trained dealer network, and it helps our dealers gain easy access to products that they know are certified by Control4. We also partner with other companies for purposes of strategic initiatives.

### Our Research and Development

Our flexible research and development model relies upon a combination of in-house staff and offshore design and manufacturing partners to improve and enhance our existing products and services, as well as develop new products, features and functionality in a cost-effective manner. We believe that our software platform is critical to expanding our leadership position within the mainstream home automation market. As a result, we devote much of our research and development resources to software development. We work closely with our dealers and their consumers to understand their current and future needs and have designed a product development process that captures and integrates feedback from our consumers.

As of December 31, 2017, we had 249 employees in our research and development organization, most of whom were located at our headquarters in Salt Lake City, Utah. Our research and development expenses were \$40.6 million in 2017,

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\$36.0 million in 2016, and \$32.4 million in 2015. We intend to continue to invest in research and development to expand our solutions and capabilities in the future.

### Our Manufacturing

We outsource most of the manufacturing of most of our hardware products to contract manufacturers. The majority of our hardware products are manufactured by iLife Technology Co., Ltd (“iLife”), Remote Control Systems, Inc. (“RCS”) and Sanmina Corporation (“Sanmina”) at their facilities located in China and Korea, with additional manufacturing performed by several other contract manufacturers located throughout Asia. Our agreement with iLife automatically renews for a one-year term in February 2018 and will continue to automatically renew for successive one-year periods unless either (i) iLife gives written notice of its intent to terminate the agreement at least 180 days prior to the end of the then current term, or (ii) Control4 gives written notice of its intent to terminate the agreement at least 30 days prior to the intended termination date. Our agreement with RCS automatically renewed for a one-year term in September 2017 and will continue to renew for successive one-year periods unless either party gives written notice of its intent to terminate the agreement at least 120 days prior to the end of the then current term. Our agreement with Sanmina automatically renewed for a one-year term in June 2017, and will continue to automatically renew for successive one-year terms unless either party gives written notice of its intent to terminate the agreement at least 90 days prior to the end of the then current term, or at any other time with at least 120 days’ written notice.

Our manufacturing partners assemble our products using our design specifications, quality assurance programs and standards. These partners procure components and assemble our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions. We maintain fulfillment centers in Salt Lake City, Utah; York, England; and Melbourne, Australia.

We have multiple sources for most of our components. However, we depend on single source manufacturers for certain critical components, including processors and touch panels. We can choose to change processor and memory modules for any of our products, but because of high implementation costs and significant lead times, we generally choose to make these changes only upon development of new products. We also rely on certain custom connectors, cables and mechanical enclosures for our hardware products that are single sourced because of the high tooling costs of sourcing the components from multiple suppliers. In each of these cases, we own the drawings and design of these custom components. We also manufacture custom builds for our high-end Triad speakers in our facility in Portland, Oregon.

### Our Sales and Marketing

Our marketing team supports our sales channel with dealer-directed advertising and promotions, lead-generation, social media engagements and training events, as well as the design and production of consumer-facing, customizable collateral, point-of-sale video and showroom signs and advertising. Our website is the anchor of our online and social media strategy, from which we direct leads to our independent dealers. Control4's bi-annual magazine, Home Smart Home, features lifestyle stories of Control4 installations from around the world and is available for download on our website and helps drive demand for our solutions and leads for our dealers.

We continue to focus on lead generation through online marketing and qualifying inbound leads for our dealers. As interested consumers go online to research home automation solutions, we help direct them to dealers in their markets. To better qualify these leads and direct them to interested dealers, we employ a small team of telemarketers. In addition to speaking directly to prospects, these inside representatives work closely with dealers, to assist them in direct customer outreach.

We are active participants at global industry conferences and maintain a significant presence at Custom Electronics Design and Installation Association ("CEDIA") Expo trade shows. Beyond CEDIA Expo in the United States, we exhibit at ISE, the annual industry trade show held in Amsterdam, as well as participate in CEDIA-specific events and tradeshows throughout China to assist in the recruitment and training of new dealers in that region. We are frequently featured in the trade press and maintain strong relationships with the industry's key analysts and associations. We believe that partnering with device manufacturers, leveraging co-marketing partnerships, expanding our sales channels and increasing our brand recognition among consumers are key components of our growth strategy.

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Our Competition

The market for home automation systems is fragmented, highly competitive and continually evolving. Our current competitors fall into several categories:

- providers that focus primarily on the professional installation segment of the home automation market, including Crestron, Elan, Lutron and Savant;
- providers of point products that address a narrow set of networking, entertainment or control capabilities, including Logitech, Luxul, Nest, Ruckus, Ring, Sonance, Sonos and Universal Remote Control;
- providers of managed home control and security services, including ADT, AT&T, Comcast and Vivint (which in turn may utilize third-party software from companies including Alarm.com and iControl);
  - providers of device control platforms such as Apple HomeKit and SmartThings; and
- large technology companies such as Amazon, Apple, Google and Samsung that offer device control capabilities within some of their own products, applications and services, and are engaged in ongoing development efforts to address the broader home automation market.

In the past, companies that provide popular point solutions have eliminated or restricted, and may again eliminate or restrict, our ability to control and integrate with their products.

Given the growth dynamics of this market, there are many new and existing companies targeting portions of the mainstream home automation market. To the extent that consumers adopt products, applications and services from a single large technology company, or if any of these companies broaden their home automation capabilities, we will face increased competition.

The principal competitive factors in our market include the:

- breadth of home automation capabilities provided;

- simplicity of use and installation;
- interoperability with third-party devices;
- price and total cost of ownership;
- sales reach and local installation and support capabilities; and
- brand awareness and reputation.

We believe that our home automation solution competes favorably with respect to these factors. Nevertheless, many of our competitors have substantially greater financial, technical and other resources, greater name recognition, larger sales and marketing budgets, broader distribution channels, and larger and more mature intellectual property portfolios than we do.

#### Our Intellectual Property

Our success and ability to compete effectively depend in part on our ability to protect our proprietary technology and to establish and adequately protect our intellectual property rights. To accomplish these objectives, we rely on a combination of patent, trademark, copyright and trade secret laws in the United States and other jurisdictions, as well as license agreements, confidentiality agreements and other contractual protections.

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As of December 31, 2017, we owned 61 issued U.S. patents (20 of which are design patents) that are scheduled to expire between 2025 and 2034, with respect to utility patents, and between 2020 and 2029, with respect to design patents. We continue to file patent applications in multiple jurisdictions and as of December 31, 2017, we had 10 patent applications published and 7 patent applications pending in the United States. We also had 15 issued patents and 1 pending patent application under foreign jurisdictions and treaties such as Canada, Australia, New Zealand, the United Kingdom, Germany, France and the European Patent Convention.

We also rely on several registered and unregistered trademarks to protect our brand. As of December 31, 2017, we had the following registered trademarks: (a) Control4, Control4 My Home, the Control4 Design, the 4 Design, 4Store, 4Sight, Mockupancy, Pakedge, Pakedge SectorMaxx, Pakedge TruStream, Smartwav, Stealth Ports, Triad, the Triad Design, the Triangle Design, BakPak, and the BakPak and Pakedge Device&Software Inc. Design in the United States, (b) Control4 in Brazil, Canada, China, the European Union, India and Mexico, (c) the Control4 Design in China, and (d) the 4 Design in Brazil, China, the European Union and Mexico. As of December 31, 2017, we also had 12 trademark applications, for various marks, pending in Australia, China, the European Union, India and the United States.

We have filed for U.S. copyright protection for our source code for all major releases of our software. We also license software from third parties for integration into or use with our products, including open-source software and other commercially available software.

In addition, we seek to protect our intellectual property rights by requiring our employees and independent contractors involved in development to enter into agreements acknowledging that all inventions, trade secrets, works of authorship, developments, concepts, processes, improvements and other works generated by them on our behalf are our intellectual property, and assigning to us any rights, including intellectual property rights, that they may claim in those works.

## Employees

As of December 31, 2017, we had 635 full-time employees, including 526 employees in the United States and 109 employees outside the United States. None of our employees are currently represented by a labor union or trade council with respect to his or her employment with us. We have not experienced any work stoppages and we consider our relations with our employees to be good.

## Available Information

Our website is located at [www.Control4.com](http://www.Control4.com), and our investor relations website is located at [www.investor.Control4.com](http://www.investor.Control4.com). Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and our Proxy Statements are available through our investor relations website, free of charge, after we file them with the Securities and Exchange Commission (“SEC”). You may also visit the SEC's website at [www.sec.gov](http://www.sec.gov) to view all of the reports we file or furnish with the SEC. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. You can get information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

We webcast via our investor relations website our earnings calls and certain events we participate in or host with members of the investment community. Our investor relations website also provides notifications of news or announcements regarding our financial performance, including SEC filings, investor events, press and earnings releases, and blogs. Further corporate governance information, including our corporate governance guidelines and board committee charters, is also available on our investor relations website under the heading "Corporate Governance." The content of our websites is not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). We will remain an emerging growth company until the earliest to occur of: the last day of the fiscal year in which we have more than \$1.0 billion in annual revenue; the date we qualify as a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates determined as of the last business day of the previous second fiscal quarter; the issuance, in any three-year period, by us of more than \$1.0 billion in non-convertible debt securities; or December 31, 2018, the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

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ITEM 1A. Risk Factors

A description of certain risks and uncertainties associated with our business is set forth below. You should carefully consider such risks and uncertainties, together with the other information contained in this report, and in our other public filings. Factors that could cause our business, financial condition or operating results to differ materially from the plans, projections and other forward-looking statements included in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this report and in our other public filings include, but are not limited to, the following risks and uncertainties, which could cause substantial harm to our business, financial condition or operating results and the market price of our stock to decline, perhaps significantly.

Risks Related to Our Business and Industry

We have incurred operating losses in the past, may incur operating losses in the future, and may not achieve or maintain profitability.

We began our operations in 2003. For most of our history, we have experienced net losses and negative cash flows from operations. As of December 31, 2017, we had an accumulated deficit of \$67.0 million. We expect our operating expenses to increase in the future as we expand our operations. If our revenue does not grow to offset any increased expenses, we will not be profitable. After achieving profitability in 2013 and 2014 of \$3.5 million and \$8.2 million respectively, we sustained a net loss of \$1.7 million in 2015. Our net income for the years ended December 31, 2016 and 2017 was \$13.0 million and \$16.0 million, respectively, but we may incur significant losses in the future for a number of reasons, including without limitation the other risks and uncertainties described herein. Additionally, we may encounter unforeseen operating or legal expenses, difficulties, complications, delays in manufacturing and selling our products and other unknown factors that may result in losses in future periods. If these losses exceed our expectations or our revenue growth expectations are not met in future periods, our profitability will be harmed and our stock price may fall.

The markets in which we participate are highly competitive and many companies, including large technology companies, retailers, broadband and security service providers, as well as other managed service providers, are actively targeting the home automation market. Our failure to differentiate ourselves and compete successfully against these companies would make it difficult for us to add and retain consumers, and our sales and profitability could be adversely affected.

The market for home automation is fragmented, highly competitive and continually evolving. A number of technology companies, including industry leaders such as Amazon, Apple, Google, Honeywell, Lutron and Samsung, offer device control capabilities in some of their products, applications and services and are engaged in ongoing development efforts to address even broader segments of the home automation market. These large technology companies already have broad consumer awareness and sell a variety of devices for the home, and consumers may choose their offerings instead of ours, even if we offer broader interoperability or superior products and services. Additionally, these and other companies may further expand into our industry by developing additional solutions or by acquiring other providers. Similarly, many managed service providers, such as cable TV, telephone and security companies, are offering services that provide device control capability within the home for an additional monthly service fee. For example, Comcast's Xfinity service offers residential security, energy and automation services, and Vivint has made a significant effort to market its smart home services. These managed service providers have the advantage of leveraging their existing consumer base, network of installation and support technicians and name recognition to gain traction in the home automation market. In addition, consumers may prefer the monthly service fee with little to no upfront cost offered by some of these managed service providers over a larger upfront cost with little to no monthly service fees.

We expect competition from these large technology companies, retailers and managed service providers to increase in the future. This increased competition could result in pricing pressure, reduced sales, lower margins or the failure of our solutions to achieve or maintain broad market acceptance. To remain competitive and to maintain our position as a leading provider of professionally installed automation and control solutions for the connected home, we will need to invest continuously in product development, marketing, dealer and distributor service and support, and product delivery infrastructure. We may not have sufficient resources to continue to make the investments in all of the areas needed to maintain our competitive position. In addition, many of our competitors have longer operating histories, greater name recognition, larger consumer bases and significantly greater financial, technical, sales, marketing and other resources than us, which may provide them with an advantage in developing, marketing or servicing new solutions. Increased competition could reduce our market

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share, revenue and operating margins, increase our operating costs, harm our competitive position or otherwise harm our business and results of operations.

Consumers may choose to adopt point products that provide control of discrete home functionality rather than adopt our unified home automation solution. If we are unable to increase market acceptance of the benefits of our unified solution, 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 the home, such as a thermostat, lighting or alarm system 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 home control solution over time with minimal upfront costs, despite the disadvantages of this approach. While we have built our solution to be flexible and support many third-party point products, the adoption of these products may reduce the revenue we receive for each installation. It is therefore important that we provide attractive top-quality products in many areas, such as networking, lighting, audio, video, thermostats and security, and establish broad market awareness and acceptance of these solutions as well as the advantages of integrating them in a unified solution. If a significant number of consumers in our target market choose to rely solely on the functionality included in point products rather than acquiring our unified automation solution, then our business, financial condition and results of operations will be harmed, and we may not be able to achieve sustained growth or our business may decline.

Providers of luxury integrated installations with long operating histories, established markets, broad user bases and proven consumer acceptance, may be successful in expanding their offerings in the mainstream home automation market, or otherwise compete against our solutions, which may reduce our market share and harm our growth and future prospects.

Many companies with which we directly compete have been operating in this industry for many years, and as a result, have established significant name recognition in the home automation industry. For example, Crestron, a provider of luxury integrated installations, has been in business for over 40 years and has become an established presence in the home automation industry. Given the strong growth potential of the market, we expect there to be many new entrants in the future. To the extent these providers are able to develop more affordable or attractive products or otherwise compete with our solutions across any of our target demographics, our growth may be constrained and our business could suffer.

Since we rely on third-party dealers and distributors to sell and install our solutions, we do not have a direct sales pipeline, which makes it difficult for us to accurately forecast future sales and correctly predict manufacturing requirements.

We depend on our independent dealer and distributor network to sell and install our solution. As a result, we do not directly develop or control our sales pipeline, making it difficult for us to accurately predict future sales. In addition, because the production of certain of our products requires long lead times, we enter into agreements for the manufacture and purchase of certain of our products well in advance of the time in which those products will be sold. These contracts are based on our best estimates of our near-term product needs. If we underestimate consumer demand, we may forego revenue opportunities, lose market share and damage our relationships. Conversely, if we overestimate consumer demand, we may purchase more inventory than we are able to sell at any given time, or at all. If we fail to accurately estimate demand for our products, we could have excess or obsolete inventory, resulting in a decline in the value of our inventory, which would increase our costs of revenues and reduce our liquidity. Our failure to accurately manage inventory relative to demand would adversely affect our results of operations.

We have relatively limited visibility regarding the consumers that ultimately purchase our products, and we often rely on information from third-party dealers and distributors to help us manage our business. If we are unable to obtain 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 independent dealers and distributors. These dealers and distributors work with consumers to design, install, update and maintain their home automation installations. While we are able to track orders from dealers and distributors and have access to certain information about the configurations of the Control4 systems they install that we receive through our controllers, we also rely on these dealers and distributors to provide us with information about consumer behavior, product and system feedback, consumer demographics, buying patterns and information about our competitors. We use this channel sell-through data, along with other metrics, to assess consumer demand for our solutions, develop new products, adjust pricing and make other strategic business decisions. Our 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. In

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addition, from time to time we collect information directly from consumers through surveys that we conduct and other methods, but the consumers who chose to participate self-select and vary by geographic region and from period to period, which may impact the usefulness of the results. 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.

Our quarterly results of operations have fluctuated and may 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 revenue and results of operations have fluctuated and may continue to fluctuate as a result of a variety of factors, many of which are outside of our control. In the past when our quarterly revenue or results of operations have fallen below the consensus expectations of securities analysts, the price of our common stock has declined. If our quarterly revenue or results of operations fall below the consensus expectations of investors or securities analysts in the future, the price of our common stock could decline again, perhaps substantially. Fluctuations in our results of operations may be due to a number of factors, including but not limited to:

- Demand for and market acceptance of our solutions;
- Our ability to continue to develop and maintain relationships with productive independent dealers and distributors and incentivize them to continue to market, sell, install and support our solutions;
- The ability of our contract manufacturers to continue to manufacture high-quality products, and to supply sufficient products to meet our demands;
- The timing and success of acquisitions, new product introductions or upgrades by us or by our competitors;
- The strength of regional, national and global economies;
- The strength of the U.S. dollar relative to other currencies and the impact this has on dealer and distributor margins and their ability to competitively sell our products to consumers;
- The impact of harsh seasonal weather, natural disasters or manmade problems such as terrorism;
- Changes in our business and pricing policies, or those of our competitors;

- Competition, including entry into the industry by new competitors and new offerings by existing competitors;
- The impact of seasonality on our business;
- A systemic impairment or failure of one or more of our products that erodes dealer and/or end user confidence;
- Political or regulatory changes in the markets in which we operate;
- The cost and availability of component parts used in our products;
- Aggressive business tactics by our competitors, including: selling at a discount, offering products on a bundled basis at no charge, extensive marketing efforts, and providing financing incentives;
- The amount and timing of expenditures, including those related to expanding our operations, increasing research and development, introducing new solutions or costs related to disputes and litigation; and
- Temporary discounts or permanent changes in the price or payment terms for our solutions.

Due to the foregoing factors and the other risks discussed herein, you should not rely on quarter-to-quarter comparisons of our results of operations as an indication of our future performance, nor should you consider any revenue growth or results of operations in any quarter to be indicative of our future performance.

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

Our ability to increase sales will depend in large part on our ability to enhance and improve our solutions, to introduce new solutions in a timely manner, to sell into new markets, and to further penetrate our existing markets. The success of any enhancement or new product or solution depends on several factors, including the timely completion, introduction and market acceptance of enhanced or new solutions, the ability to attract, retain and effectively train product development, sales and marketing personnel (among others), the ability to develop relationships with independent dealers and distributors and the effectiveness of our marketing programs. Any new product or solution 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 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 of our solutions and our ability to design our solutions to meet consumer demand. Moreover, we are frequently required to enhance and update our solutions as a result of changing standards and technological developments, which makes it difficult to recover the cost of development and forces us to continually qualify new solutions with our consumers. If we are unable to successfully develop or acquire new solutions, enhance our existing solutions to meet consumer requirements in a timely manner, sell solutions into new markets, or sell our solutions to additional consumers in our existing markets, our revenue may not grow as expected or it may decline.

Our success depends, in part, on our ability to develop and expand our global network of independent dealers and distributors.

As of December 31, 2017, we have over 5,290 active direct dealers and 50 distributors authorized to sell, install and support our solutions. We rely on our independent dealers and distributors to provide consumers with a successful Control4 home automation experience. In some cases, dealers may choose not to offer our solution and instead offer a product from one of our competitors or, in other cases, the dealer may simply discontinue its operations. In order to continue our growth and expand our business, it is important that we continue to add new dealers and distributors and ensure that most of our existing relationships remain productive. We must also work to expand our network of dealers and distributors 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 dealers in our markets, there are a finite number of dealers that are able to perform the types of technical installations required for home automation systems. In the event that we saturate the available dealer pool, or if market or other forces cause the available pool of dealers to decline, it may be increasingly difficult to grow our business. As consumers' home automation options grow, it is important that we enhance our dealer footprint by broadening the expertise of our dealers, working with larger and more sophisticated dealers and distributors and expanding our line of mainstream consumer products that our dealers and distributors offer. If we are unable to expand our network of independent dealers and distributors, or maintain the relationships with our existing dealers and distributors, our business could be harmed.

We rely on our independent dealers and distributors to sell our solutions, and if our dealers and distributors fail to perform, our ability to sell and distribute our products and services will be limited, and our results of operations may be harmed.

Substantially all of our revenue is generated through the sales of our solutions by our authorized dealers and distributors. Our dealers and distributors are independent businesses that voluntarily sell our products as well as the products of other companies to consumers. We provide our dealers and distributors with specific training programs to assist them in selling, installing and servicing our products, and we also provide our dealer-network with leads to potential customers which we generate through our internal marketing efforts, but we cannot assure that these steps will be effective. We have observed, and expect to continue to observe, high volatility in the monthly, quarterly and annual sales performance of individual dealers and distributors. Although we can make estimated forecasts of cumulative sales of large numbers of dealers and distributors, we cannot assure their accuracy collectively or individually. Accordingly, we may not be able to reduce or slow our spending quickly enough if our actual sales fall short of our expectations. As a result, we expect that our revenues, results of operations and cash flows may fluctuate significantly on a quarterly basis. We believe that period-to-period comparisons of our revenues, results of operations and cash flows may not be meaningful and should not be relied upon as an indication of future performance.

Our independent dealers and distributors may be unsuccessful in marketing, selling, installing and supporting our products and services. If we are unable to provide high-quality products in a timely manner at competitive prices and to develop and maintain effective sales incentive programs for our dealers and distributors, we may not be able to incentivize them to sell our products to consumers. Our dealers and distributors may also market, sell and support products and services

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that are competitive with ours, and may devote more resources to the marketing, sales, and support of such competitive products. Our dealers and distributors may have incentives to promote our competitors' products to the detriment of our own, or may cease selling our products altogether. Our agreements with our dealers and distributors may generally be terminated for any reason by either party with advance notice. We cannot assure that we will retain these dealers and distributors, or that we will be able to secure additional or replacement dealers and distributors. For example, in September 2017, we announced that we were transitioning from a direct-to-dealer to a single distributor sales model in India. This transition may create disruption in the established channels and our sales and results of operations may be impacted in connection with this or any similar change in our sales process in the future.

In addition, while we take certain steps to protect ourselves from liability for the actions of our dealers and distributors, such as including contractual provisions limiting our liability with both consumers and dealer/distributors, consumers may still seek to recover amounts from us for any damages caused by independent dealers in connection with system installations, or the failure of a system to perform properly due to an incorrect installation by a dealer, and, in the event of litigation with respect to these matters, we cannot guarantee that our contractual protections will be enforced. Furthermore, dealers and distributors may initiate claims against us related to any failure or perceived failure to operate our business in accordance with our contracts and the law. In addition, our independent dealers and distributors may use our name and our brand in ways we do not authorize, and any such improper use may harm our reputation or expose us to liability for their actions.

If we fail to effectively manage our existing sales channels then our results of operations may be harmed.

We have entered into several strategic arrangements and intend to pursue additional strategic opportunities in the future. If the intended benefits from our strategic relationships are not realized, our results of operations may be harmed.

We are in the process of growing our relationships with strategic partners in order to increase awareness of our solutions and to attempt to reach markets that we cannot currently address cost-effectively. If these relationships do not develop in the manner we intend, our future growth could be impacted. Any loss of a major partner or distribution channel or other channel disruption could harm our results of operations and make us more dependent on alternate channels, damage our reputation, increase pricing and promotional pressures from other partners and distribution channels, increase our marketing costs, or harm buying and inventory patterns, payment terms or other contractual terms.

If we do not maintain the compatibility of our solutions with third-party products and applications that our consumers use, demand for our solutions could decline.

Our solutions are designed to interoperate with a wide range of other third-party products, including products in the areas of audio, video, lighting, temperature, and security, and we benefit from our relationships with partners that allow our system to provide integrated and extensible control of over 11,000 third party devices and services. If we do not support the continued integration of our solutions with third-party products and applications, including new and additional products, demand for our solutions could decline and we could lose sales. In addition, companies that provide certain point solutions have eliminated or restricted, and may in the future, eliminate or restrict, our ability to integrate with, control and otherwise be compatible with these products. As a result, we may not be successful in making our solutions compatible with these third-party products and applications or lose functionality in existing systems to the extent that they depend on the ability to integrate with third-party products, which could reduce demand for our solutions. In addition, if prospective consumers require customized features or functions that we do not offer, then the market for our solutions may be harmed.

If we are unable to adapt to technological change and implement technological and aesthetic enhancements to our products, this could impair our ability to remain competitive.

The market for home automation and control solutions is characterized by rapid technological change, frequent introductions of new products and evolving industry standards. However, product development often requires significant lead-time and upfront investment and our ability to attract new consumers and increase revenue from existing consumers will depend in significant part on our ability to accurately anticipate changes in industry standards and to continue to appropriately fund development efforts to enhance existing solutions or introduce new solutions in a timely basis to keep pace with technological developments. This is true of all our products but is particularly important with respect to our user interface and other direct consumer interface products. 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, which

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could impact sales and decrease our market share. Any delay or failure in the introduction of new or enhanced solutions could harm our business, results of operations and financial condition.

We currently rely on contract manufacturers to manufacture our products and on component vendors to supply parts used in our products. The majority of our components are supplied by a single source. Any disruption in our supply chain, or our failure to successfully manage our relationships with our contract manufacturers or component vendors could harm our business.

Our reliance on contract manufacturers reduces our control over the assembly process, exposing us to risks, including reduced control over quality assurance, production costs and product supply. We rely on a limited number of contract manufacturers to manufacture most of our products and components, and in many cases one of these manufacturers is our only source for a particular product or product family. We also do business with a number of component vendors, and the parts they supply may not perform as expected. For the year ended December 31, 2017, three contract manufacturers, iLife, RCS and Sanmina, manufactured approximately 58% of our inventory purchases. Most of our contract manufacturers and component vendors are located outside of the United States, and all of them may be subject to political, economic, social and legal uncertainties that may harm our relationships with them. If we fail to manage our relationships with our contract manufacturers, component vendors or shipping partners effectively, or if our contract manufacturers, component vendors or shipping partners experience delays, disruptions, capacity constraints or quality control problems in their operations, our ability to ship products may be impaired and our competitive position and reputation could be harmed. In addition, any adverse change in our contract manufacturers', component vendors' or shipping partners' financial or business condition could disrupt our ability to supply quality products to our dealers and distributors. If we are required to change contract manufacturers, component vendors, or shipping partners we may lose revenue, incur increased costs or damage our relationships, or we might be unable to find a new contract manufacturer or component vendor on acceptable terms, or at all. In addition, qualifying a new contract manufacturer or component vendor could be an expensive and lengthy process. If we experience increased demand that our contract manufacturers or component vendors are unable to fulfill, or if they are unable to provide us with adequate supplies of high-quality products for any reason, we could experience a delay in our order fulfillment, and our business, results of operations and financial condition would be harmed.

Changes in import/export regulatory regimes and duties could negatively impact our business.

The current presidential administration in the United States has made comments suggesting that it is not supportive of certain existing international trade agreements, and at this time, it remains unclear what this administration may or may not do with respect to these international trade agreements. Additional or increased import taxes or duties in the United States could negatively impact our cost structures. If the United States were to withdraw from or materially modify certain international trade agreements, change tax provisions related to the global manufacturing and sales of our products, or otherwise alter regulations impacting our existing business, our financial condition and results of operations could be adversely affected.

Growth of our business may depend on market awareness and a strong brand, and any failure to develop, broaden, protect and enhance market awareness of our products could hurt our ability to retain or attract consumers.

Because of the competitive nature of the mainstream home automation market, we believe that building and maintaining market awareness, brand recognition and goodwill may be material to our success. This will depend largely on our ability to continue to provide high-quality solutions, and we may not be able to do so effectively. We may choose to engage in a broader marketing campaigns to further promote our brand, but this effort may not be successful. Our efforts in developing our brand may be affected by the marketing efforts of our competitors, negative publicity and social media commentary, and our reliance on our independent dealers, distributors and strategic partners to install our products and promote our brand effectively. If we are unable to cost-effectively maintain and increase positive awareness of our brand, our business, results of operations and financial condition could be harmed.

We operate in the emerging and evolving home automation market, which may develop more slowly or differently than we expect. If the mainstream home automation market does not grow as we expect, or if we cannot expand our 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 additional operating losses.

The market for home automation and control solutions is evolving, and it is uncertain whether our solutions will achieve and sustain high levels of demand and market acceptance. Some consumers may be reluctant or unwilling to use our solutions for a number of reasons, including satisfaction with other solutions, concerns about cost, and lack of awareness of our

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solutions. Unified home automation solutions such as ours have traditionally been luxury purchases for the high end of the residential market, and while our solutions target the high end of the market, we also have solutions that target middle- and entry-level home owners, including our EA-1 that is designed to control smaller, single room projects with an entertainment component and a new CA-1 controller for smaller projects that only include lighting, comfort, and/or security, which we released in February 2018. Our ability to expand the sales of our solutions to a broader consumer base depends on several factors, including market awareness of our solutions, the timely completion, introduction and market acceptance of our solutions, the ability to attract, retain and effectively train sales and marketing personnel, the effectiveness of our marketing programs, the ability to develop effective relationships with independent dealers and distributors, the cost and functionality of our solutions and the success of our competitors. If we are unsuccessful in developing and marketing our home automation solutions to mainstream consumers, or if these consumers do not perceive or value the benefits of our solutions, the market for our solutions might not continue to develop or might develop more slowly than we expect, either of which would harm our revenue and growth prospects.

Our consumers may experience service failures or interruptions due to defects in the software, infrastructure, third-party components or processes that comprise our solutions, or due to errors in product installation or servicing by our independent dealers, any of which could harm our business.

Our solutions may contain undetected defects in the software, infrastructure, third-party components or processes. If these defects lead to service failures, we could be subject to liability for such failures and we could experience harm to our branded reputation. Such defects could also result in a loss of, or delay in, market acceptance of our solutions, which could harm our business, results of operations and financial condition.

In addition to failures due to product defects, because our solutions are installed by independent dealers, if they do not install or maintain our solutions correctly or if the underlying network or infrastructure in a home or business is not sufficiently robust, our solutions may not function properly. If the improper installation or maintenance of our solutions leads to service failures of a product or solution, we could experience harm to our branded reputation, claims by our consumers, dealers, distributors, strategic partners or developers and we may incur increased expense during the period required to address the cause of the problem, which could harm our business, results of operations and financial condition.

Any defect in, or disruption to, our solutions could cause consumers to remove their products, not to purchase additional products from us, prevent other potential consumers from purchasing our solutions, or harm our reputation. The nature of the solutions we provide, including our interface with home security solutions, may expose us to greater risks of liability for system failure or even installation errors by our independent dealers than may be inherent in other businesses. Substantially all of our dealer agreements contain provisions limiting our liability to dealers and our consumers in an attempt to reduce this risk. However, in the event of litigation with respect to these matters, we cannot be sure that these limitations will be enforced, and defending a lawsuit, regardless of its merit, could be costly, divert management's attention, affect our ability to obtain or maintain liability insurance on acceptable terms and could harm our business. 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 jurisdictions may limit or prohibit insurance coverage for punitive or certain other types of damages or liability arising from gross negligence. Although we currently maintain some warranty

reserves, we cannot be sure that these warranty reserves will be sufficient to cover future liabilities. Furthermore, we may be required to indemnify our dealers, distributors and other partners against certain liabilities they may incur as a result of defects of our products.

Our networking solutions business may be harmed if users perceive our solution as the cause of a slow or unreliable network connection, or in the event of a high-profile network failure, even though certain technical problems experienced by users may not be caused by our products.

Our networking solutions have been deployed in many different locations and user environments and are capable of providing connectivity to many different types of Wi-Fi-enabled devices operating a variety of applications. The ability of our products to operate effectively can be negatively impacted by many different elements unrelated to our products. For example, a user's experience may suffer from an incorrect setting in a Wi-Fi device. Although certain technical problems experienced by users may not be caused by our products, users often may perceive the underlying cause to be a result of poor performance of the wireless network. This perception, even if incorrect, could harm our business and reputation. Similarly, a high-profile network failure may be caused by improper operation of the network or failure of a network component that we did not supply, but users and other service providers may perceive that our products were implicated, which, even if incorrect, could harm our business, operating results and financial condition.

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Failure to maintain the security of our information and technology networks, including information relating to our dealers, distributors, partners, consumers and employees, could adversely affect our business. Furthermore, without limiting the preceding sentence, if security breaches in connection with the delivery of our products and services allow unauthorized third parties to obtain control of or otherwise access consumers' networks or appliances, our reputation, business, results of operations and financial condition could be harmed.

The legal, regulatory and contractual environment surrounding information security, privacy and fraud is constantly evolving and companies that collect and retain information are under increasing attack by cyber- criminals around the world. 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, including financial information, from and pertaining to our dealers, distributors, partners, consumers and employees. The protection of dealer, distributor, partner, consumer and employee data is important to us, and we devote significant resources to addressing security vulnerabilities in our products and information technology systems, including encrypting some data repositories and engaging security experts to conduct penetration testing to help us uncover vulnerabilities in our systems. However, the policies and security measures that we put in place cannot guarantee security, and our information technology infrastructure may be vulnerable to criminal cyber-attacks or data security incidents due to employee or dealer negligence, error, malfeasance, or other vulnerabilities. Cyber security attacks are increasingly sophisticated, change frequently, and often go undetected until after an attack has been launched. We may fail to identify these new and complex methods of attack, or fail to invest sufficient resources in security measures. We have and will continue to experience cyber-attacks, and we cannot be certain that advances in cyber-capabilities or other developments will not permit compromise or breach the technology protecting the networks that access our products and services and repositories where we store this information.

We have acquired a number of companies over the years and may continue to do so in the future. While we make significant efforts to address any information technology security issues with respect to our acquisitions, we may still inherit such risks when we integrate the acquired products and systems.

In addition, consumers can use our tools to access their automation systems remotely, and certain of our employees and independent dealers can monitor access and update certain of our products and services remotely. Security breaches by third parties or by, or originating from, one or more of our dealers, distributors or employees, that allow unauthorized third parties to obtain control of our consumers' appliances through our products or to obtain, collect, use or disclose any personal data of consumers, could harm our reputation, business, results of operations and financial condition. Furthermore, although we do not recommend or approve of port forwarding for remote access to our solutions, certain of our dealers have in the past and may in the future enable port forwarding, which could create security vulnerabilities in their customers' home networks.

It is difficult to determine what harm may directly result from any specific interruption or security breach. Any failure or perceived failure to maintain performance, reliability, security and availability of systems or the actual or potential theft, loss, fraudulent use or misuse of our products or associated confidential information, including personally identifiable data of a dealer, distributor, partner, consumer, and employee, could result in:

- harm to our reputation or brand, which could lead some consumers to stop using certain of our products or services, reduce or delay future purchases of our products or services, use competing products or services, or materially and adversely affect the overall market perception of the security and reliability of our services and home automation products generally;
- individual and/or class action lawsuits, which could result in financial judgments against us and that would cause us to incur legal fees and costs;
- legal or regulatory enforcement action, which could result in fines and/or penalties and which would cause us to incur legal fees and costs; and/or
- additional costs associated with responding to the interruption or security breach, such as investigative and remediation costs, the costs of providing individuals and/or data owners with notice of the breach, legal fees, the costs of any additional fraud detection activities, or the costs of prolonged system disruptions or shutdowns.

Any of these actions could materially adversely impact our business and results of operations.

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Because we store, process, and use data, some of which contains personal information, we are subject to complex and evolving federal, state, and foreign laws and regulations regarding privacy, data protection, and other matters. Many of these laws and regulations are subject to change and uncertain interpretation, and could result in investigations, claims, changes to our business practices, increased cost of operations, and declines in user growth, retention, or engagement, any of which could seriously harm our business.

We are subject to a variety of laws and regulations that involve matters central to our business, including user privacy, rights of publicity, data protection, content, intellectual property, distribution, electronic contracts and other communications, competition, protection of minors, consumer protection, taxation, and online-payment services. Because we store, process, and use data, some of which contains personal information, we are subject to complex and evolving federal, state, and foreign laws and regulations regarding privacy, data protection, and other matters. These laws can be particularly restrictive in countries outside the United States. Both in the United States and abroad, these laws and regulations constantly evolve and remain subject to significant change. In addition, the application and interpretation of these laws and regulations are often uncertain, particularly in the new and rapidly evolving industry in which we operate. Continually implementing up-to-date data security tools and procedures and maintaining privacy standards that comply with ever-changing privacy regulations in multiple jurisdictions (including but not limited to the General Data Protection Regulation (GDPR) in the European Union, which will go into effect on May 25, 2018) is challenging.

In addition, on July 12, 2016 the European Commission formally adopted the new EU – U.S. Privacy Shield, which provides a safe harbor for the transfer of personal information, by U.S. companies doing business in Europe from the European Economic Area to the United States provided that such U.S. companies self-certify under this framework. Control4 has submitted its self-certification application pursuant to the Privacy Shield, and as part of this self-certification, we have committed to abide by the Privacy Shield principles with respect to any personal information transferred.

We publicly post our privacy policies and practices concerning our processing, use and disclosure of personal information. Our privacy policy and other statements we publish provide promises and assurances about privacy and security that could subject us to potential regulatory action or other liabilities if such statements are found to be deceptive or misrepresentative of our practices or if we fail to take adequate measures to ensure that we adhere to applicable regulations, or if our third-party data processors fail to adequately protect personal information that they process on our behalf.

We encounter seasonality in sales, which could harm the amount, timing and predictability of our revenue and cause our stock price to fluctuate.

We have little recurring revenue or backlog, and our revenue is generated from orders of our solutions from new and existing consumers, each of which may cause our quarterly results to fluctuate. In addition, we may experience seasonality in the sales of our solutions. Historically, our revenue is generally highest in the fourth quarter and lowest

in the first quarter. Seasonal variations in our sales may lead to significant fluctuations in our cash flows and results of operations on a quarterly basis and this may cause our stock price to fluctuate.

We may not generate significant revenue as a result of our current research and development efforts.

We have made and expect to continue to make significant investments in research and development and related product opportunities. For the year ended December 31, 2017, we spent \$40.6 million on research and development expenses. High levels of expenditures for research and development could harm our results of operations, especially if not offset by corresponding future revenue increases. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. However, it is difficult to estimate when, if ever, we will generate significant revenue as a result of these investments.

Our strategy includes pursuing acquisitions and our potential inability to successfully integrate newly-acquired technologies, assets, businesses, or personnel may harm our financial results.

We believe part of our growth will be driven by acquisitions of other companies or their technologies, assets and businesses. Recent acquisitions include Pakedge in January 2016, Triad in February 2017 and substantially all the assets of ihiji in December 2017. These acquisitions and any future acquisitions we complete will give rise to risks, including:

- Incurring higher than anticipated capital expenditures and operating expenses;

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- Failing to assimilate the operations and personnel, or failing to retain the key personnel of the acquired company or business;
- Failing to integrate the acquired technologies, or incurring significant expense to integrate acquired technologies into our solutions;
- Disrupting our ongoing business;
- Dissipating or diverting our management resources;
- Failing to maintain uniform standards, controls and policies;
- Incurring significant accounting charges;
- Impairing relationships with employees, dealers, distributors, partners or consumers;
- Finding that the acquired technology, assets or business does not further our business strategy, that we overpaid for the technology, assets 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 during diligence conducted prior to acquiring the company, including but not limited to the risk that the products or services of the acquired company violate third-party intellectual property rights or regulatory standards or contain other vulnerabilities; and
- Being unable to generate sufficient revenue from acquisitions to offset the associated acquisition costs.

Fully integrating acquired technology, asset, business, or personnel into our operations may take a significant amount of time and resources. We may not be successful in overcoming these risks or any other problems encountered with such acquisitions. To the extent we do not successfully avoid or overcome the risks or problems related to any such acquisitions, our results of operations and financial condition could be harmed. Acquisitions also could impact our financial position and capital needs, or could cause fluctuations in our quarterly and annual results of operations.

Acquisitions could include significant goodwill and intangible assets. The amortization of such intangible assets would reduce our profitability and there may be 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.

Future acquisitions of technologies, assets or businesses, that are paid for partially or entirely through the issuance of stock or stock rights, could dilute the ownership of our existing stockholders.

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 such future acquisitions, net income (loss) 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 expanding our solutions into lines of business with which we have no experience, investing in new and unproven technologies, and expanding our existing sales channels or adding new sales channels, including through acquisitions such as our recent acquisition of Triad and its speaker lines. 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, or materially and adversely affect our business, financial condition, results of operations and cash flows.

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Our gross margins can vary significantly depending on multiple factors, which can result in fluctuations in our results of operations.

Our gross margins are likely to vary due to consumer demand, product mix, new product introductions, unit volumes, commodity and supply chain costs, product delivery costs, geographic sales mix, excess and obsolete inventory and the complexity and functionality of new product innovations. In particular, if we are not able to introduce new solutions in a timely manner at the cost we expect, or if consumer demand for our solutions is less than we anticipate, or if there are product pricing, marketing and other initiatives by our competitors to which we need to react that lower our margins, then our overall gross margin will be less than we project. The impact of these factors on gross margins can create unanticipated fluctuations in our results of operations, which may cause volatility in our stock price.

If we are unable to substantially utilize our net operating loss or tax credit carryforwards, our financial results will be harmed.

As of December 31, 2017, our net operating loss (“NOL”) carryforward amounts for U.S. federal income and state tax purposes were \$66.7 million and \$67.8 million, respectively. In addition to the NOL carryforwards, as of December 31, 2017, we had U.S. federal and state tax credit carryforwards of \$6.6 million and \$2.8 million, respectively. While we have generated profits at times in the past, there is no assurance that we will be able to generate sufficient taxable income to utilize our NOLs or tax credits before they expire. Our NOL carryforwards were fully reserved for as of December 31, 2017.

If we are unable to manage our growth and diverse and complex operations, our reputation in the market and our ability to generate revenue from new or existing consumers may be harmed.

Because our operations are geographically diverse and complex, our personnel resources and infrastructure could become strained and our reputation in the market and our ability to successfully implement our business plan may be harmed. The growth in the size, complexity and diverse nature of our business and the expansion of our product lines and consumer base, including through acquisitions, have placed increased demands on our management and operations, and further growth, if any, may place additional strains on our resources in the future. Our ability to effectively compete and to manage our plan to continue to expand our headcount and operations may depend on, among other things:

- Maintaining institutional knowledge by retaining and expanding the core competencies critical to our operations in our senior management and key personnel;

- Increasing the productivity of our existing employees and attracting new talent;
- Maintaining existing productive relationships and developing new productive relationships with independent contract manufacturers, dealers and distributors;
- Improving our operational, financial and management controls; and
- Improving our information reporting systems and procedures.

If we do not manage the size, complexity and diverse nature of our business effectively, we could experience delayed product releases and longer response times by our dealers in assisting our consumers in implementing our solutions, and could lack adequate resources to support our consumers on an ongoing basis, any of which could harm our reputation in the market, our ability to successfully implement our business plan and our ability to generate revenue from new or existing consumers.

If we fail to retain our key employees and attract talented new personnel as needed, our business would be harmed and we might not be able to implement our business plan successfully.

Given the complex nature of the technology on which our business is based and the speed with which such technology advances, our future success is dependent, in large part, upon our ability to attract and retain highly qualified executive, managerial, engineering, and sales and marketing personnel. Competition for talented personnel is intense, and we cannot be certain that we can retain our executive, managerial, engineering, and sales and marketing personnel, or that we can attract, assimilate or retain such personnel in the future. Our inability to attract and retain such personnel could harm our business, results of operations and financial condition.

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Downturns in general economic and market conditions, including but not limited to downturns in housing markets and reductions in consumer spending, may reduce demand for our solutions, which could harm our revenue, results of operations, financial condition and cash flows.

Our revenue, results of operations and cash flows depend on the overall demand for our solutions, which can be significantly reduced in economic environments characterized by market and interest rate volatility, decreased consumer confidence, high unemployment, declines in residential remodeling and housing starts, fluctuating exchange rates, and diminished growth expectations in the U.S. economy and abroad. During periods of weak or unstable economic and market conditions, providers of products and services that represent discretionary purchases, such as our home automation products, are disproportionately affected. In addition, during these periods, the number of independent dealers and distributors may decline as the prospects for home building and home renovation projects diminish, which may have a corresponding impact on our growth prospects. Furthermore, during challenging economic times consumers may face issues in gaining timely access to sufficient credit, which could impair their ability to make timely payments. There is also an increased risk during these periods that an increased percentage of our dealers will file for bankruptcy protection, which may harm our reputation, revenue, profitability and results of operations. We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular geography or industry. Any downturns in the general economic conditions of the geographies and industries in which we operate, or any other factors negatively impacting housing markets or consumer spending, could materially and adversely impact our revenue, results of operations, financial condition and cash flows.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operations could fall below 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 our consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” the results of which form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include, or may in the future include, those related to revenue recognition, allowance for doubtful accounts, inventories, product warranties, income taxes and stock-based compensation expense. Our results of operations may be harmed if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.

Changes in existing financial accounting standards or practices, or taxation rules or practices, may harm our results of operations.

Changes in existing accounting or taxation rules or practices, new accounting pronouncements or taxation rules, or varying interpretations of current accounting pronouncements or taxation practice could harm our results of operations or the manner in which we conduct our business. For example, on December 22, 2017, “H.R.1”, f known as the “Tax Cuts and JOBS Act”, (the “Tax Act”) was signed into law, which among other changes reduces the corporate income tax rate to 21%, creates a territorial tax system (with a one-time mandatory tax on previously deferred foreign earnings), and requires companies to pay minimum taxes on foreign earnings and subjects certain payments from U.S. corporations to foreign related parties to additional taxes. While this act will result in a lower domestic income tax rate once we fully utilize our net operating loss and other accumulated tax credits, we will be subject to the one-time mandatory tax on previously deferred foreign earnings. We will continue to monitor the impact of this and further changes to applicable tax laws to our overall business strategy.

Mergers or other strategic transactions involving our competitors could weaken our competitive position, which could 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. For example, Google Inc. acquired Nest Labs, a manufacturer of thermostats and smoke detectors; Nest Labs acquired Dropcam, a home-monitoring

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camera company; and Samsung Electronics Co., Ltd. acquired SmartThings and Harman International Industries. Transactions such as these, as well as any additional consolidations, acquisitions, alliances or cooperative relationships, or new product introductions by companies in our industry, could lead to pricing pressure, reduce our market share or result in a competitor with greater financial, technical, marketing, service and other resources than ours, all of which could harm our business, results of operations and financial condition.

We are an “emerging growth company,” and any decision on our part to comply with certain reduced disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding an annual non-binding advisory vote on executive compensation and nonbinding stockholder approval of any golden parachute payments not previously approved. If we choose not to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, as we have in the past, our auditors will not be required to opine on the effectiveness of our internal control over financial reporting. As a result, investors may be less comfortable with the effectiveness of our internal controls and the risk that material weaknesses or other deficiencies in our internal controls go undetected may increase. If we choose to provide reduced disclosures in our periodic reports and proxy statements while we are an emerging growth company, as we have in the past, investors will have access to less information and analysis about our executive compensation, which may make it difficult for investors to evaluate our executive compensation practices. We cannot predict if investors find our common stock less attractive because we may rely on these exemptions and provide reduced disclosure. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be harmed. We expect that our “emerging growth company” status will expire on December 31, 2018, the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended (the “Securities Act”), for complying with new or revised accounting standards. In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we have chosen to “opt out” of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

Failure to achieve and maintain effective internal control over financial reporting could result in our failure to accurately report our financial results. Any inability to report and file our financial results accurately and timely could harm our business and adversely impact investor confidence in our company and, as a result, the value of our common stock.

Effective internal controls are necessary for us to produce reliable financial reports and are important to helping prevent financial fraud. If we cannot provide reliable financial reports or prevent fraud, our business and results of operations could be harmed, investors could lose confidence in our reported financial information, and the trading price of our stock could drop significantly. We are required to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, or Section 404. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. However, our auditors will not be required to formally opine on the effectiveness of our internal control over financial reporting pursuant to Section 404 until we are no longer an “emerging growth company” as defined in the JOBS Act, and we continue to take advantage of the exemptions available to us through the JOBS Act. We expect that our auditors will be required to formally opine on the effectiveness of our internal controls no later than our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Our compliance with Section 404 may require us to continue to incur substantial expense and expend significant management efforts. 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. 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. If we are unable to assert that our internal control over financial reporting is effective, or if our auditors are unable to express an

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opinion on the effectiveness of our internal controls when they are required to issue such opinion, investors could lose confidence in the accuracy and completeness of our financial reports, which could harm our stock price.

Our failure to raise additional capital or generate cash flows necessary to expand our operations, invest in new technologies and otherwise respond to business opportunities or unforeseen circumstances in the future could reduce our ability to compete successfully and harm our results of operations.

While we believe that our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 12 months, at some point we may need to raise additional funds, and we may not be able to obtain additional debt or equity financing on favorable terms, if at all. If we raise additional equity financing, our security holders may experience significant dilution of their ownership interests and the value of shares of our common stock could decline. If we engage in debt financing, we may be required to accept terms that restrict our ability to incur additional indebtedness, force us to maintain specified liquidity or other ratios or restrict our ability to pay dividends or make acquisitions. If we need additional capital and cannot raise it on acceptable terms, if at all, we may not be able to, among other things:

- Develop and enhance our solutions;
- Continue to expand our research and development, sales and marketing organizations;
- Hire, train and retain employees;
  - Respond to competitive pressures or unanticipated working capital requirements; or
- Pursue acquisition opportunities.

Our inability to do any of the foregoing could reduce our ability to compete successfully and harm our results of operations.

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

We are subject to income, sales, use, value added, tariffs 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, tariffs 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 and evaluating our uncertain tax positions. 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 any particular year for extended periods of time depending on the specific statute of limitations in the relevant jurisdiction.

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

A significant natural disaster, such as an earthquake, fire or a flood, or a significant power outage could harm our business, results of operations and financial condition. Natural disasters could affect our manufacturing vendors' or logistics providers' ability to perform services such as manufacturing products or assisting with shipments on a timely basis. Our three largest contract manufacturers, which manufactured 58% of our inventory purchases for the year ended December 31, 2017, have manufacturing facilities located in China and Korea. In the event our manufacturing vendors' information technology systems or manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed or cancelled, resulting in missing financial targets, such as revenue and shipment targets, for a particular quarter. 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 those regions may delay or forego purchases of our solutions from dealers and distributors, which

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may harm our results of operations for a particular period. For example, the recent hurricanes in Texas and Florida and the fires in northern California impacted ongoing projects in areas where Control4 has significant sales. In addition, acts of terrorism, including cyber terrorism or crime, could cause disruptions in our business or the business of our manufacturers, logistics providers, dealers, distributors, consumers or the economy as a whole. Given our typical concentration of sales at the end of each month and quarter, any disruption in the business of our manufacturers, logistics providers, dealers, distributors and consumers that impacts sales at the end of our quarter could have a greater impact on our quarterly results. All of the aforementioned risks may be augmented if the disaster recovery plans for us 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, or cancellations of the manufacture, deployment or shipment of our products, our business, financial condition and results of operations would be harmed.

Global or regional economic, political and social conditions could harm our business and results of operations.

External factors such as potential crime, terrorist attacks, acts of war, financial crises, trade friction or geopolitical and social turmoil in those parts of the world that serve as markets for our solutions, such as Europe, Asia or elsewhere, could harm our business and results of operations. These uncertainties may cause our consumers to reduce discretionary spending on their home and make it difficult for us to accurately plan future business activities. More generally, these geopolitical, social and economic conditions could result in increased volatility in worldwide financial markets and economies that could harm our sales. We are not insured for losses or interruptions caused by terrorist acts or acts of war. The occurrence of any of these events or circumstances could harm our business and results of operations.

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

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer privacy and protection laws, anti-bribery laws, import/export controls, federal securities laws and tax laws and regulations. As we continue to develop new products, acquire companies with new product lines and expand our geographical footprint to market and sell products directly in new jurisdictions, we may become subject to additional rules and regulations, and these regulatory requirements may be different from or more stringent than those in the United States and Europe. While we have obtained these certifications for many of our products currently sold in expanded jurisdictions, we continue to work towards full compliance for all of our products sold. Delays in meeting, or failure to meet, these certification standards may cause us to miss market opportunities and may hinder us from entering and selling our products in those markets. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, enjoinders of future shipments, mandatory product recalls, seizures, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and sanctions could further harm our business, results of operations and financial condition.

Governmental regulations affecting the import or export of our products could harm our revenues.

The United States and various foreign governments have imposed controls, export license requirements and restrictions on the import or export of some technologies, especially encryption technology, and may impose additional or broader controls, export license requirements and restrictions on the import or export of some technologies in the future. In addition, from time to time, governmental agencies have proposed additional regulation of encryption technology, such as requiring the escrow and governmental recovery of private encryption keys. Although we do not believe that any of our products currently require an export license, if our products or components of our products become subject to governmental regulation of encryption technology or other governmental regulation of imports or exports, we may be required to obtain import or export approval for such products, which could increase our costs and harm our international and domestic sales and our revenue. In addition, failure to comply with such regulations could result in penalties, costs and restrictions on export privileges, which would harm our results of operations.

Regulations related to “conflict minerals” may force us to incur additional expenses, may result in damage to our business reputation and may adversely impact our ability to conduct our business.

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”), we are required to adhere to certain reporting and other requirements regarding the use of certain minerals and derivative metals

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(referred to as “conflict minerals,” regardless of their actual country of origin) in our products. Some of these metals are commonly used in electronic equipment and devices, including our products. These requirements require that we investigate, disclose and report whether or not any such metals in our products originated from the Democratic Republic of Congo or adjoining countries. We do not directly source any of our own raw conflict minerals, rather we have an extremely complex supply chain, with numerous suppliers, many of whom may not be obligated to investigate their own supply chains, for the components and parts used in each of our products. As a result, we may incur significant costs to comply with the diligence and disclosure requirements, including costs related to determining the source of any of the relevant metals used in our products and other potential changes to products or sources of supply as a consequence of such verification activities. Because these regulations are relatively new, we and the companies comprising our supply chain each have a limited history of investigating, disclosing and reporting use of these minerals, and there is a limited history of regulatory guidance regarding compliance with these requirements. In addition, because our supply chain is so complex, we may not be able to sufficiently verify the origin of all relevant metals used in our products through the due diligence procedures that we implement, which may harm our business reputation. We may incur reputational damage if we determine that any of our products contain minerals or derivative metals that are not conflict free or if we are unable to sufficiently verify the source for all conflict minerals used in our products through the procedures we may implement. Furthermore, key components and parts that can be shown to be “conflict free” may not be available to us in sufficient quantity, or at all, or may only be available at significantly higher cost to us. If we are not able to meet customer requirements, customers may choose to disqualify us as a supplier. Any of these outcomes could adversely affect our business, financial condition or operating results.

Health care reform could increase our cost of labor

In March 2010, the Patient Protection and Affordable Care Act (the “ACA”) was signed into U.S. law. The ACA is comprehensive U.S. health care legislation that includes provisions that subject us to potential penalties unless we offer certain employees minimum essential health care coverage that is affordable and provides minimum value. Recent changes, especially the employer mandate and employer penalties that became effective January 1, 2015, may increase our labor costs significantly in future years. In order to comply with the employer mandate provision of the ACA, we offer health care coverage to all applicable employees eligible for coverage under the ACA. Designating employees as eligible is complex, and is subject to challenge by employees and the Internal Revenue Service. While we believe we have properly identified eligible employees, a later determination that we failed to offer the required health coverage to eligible employees could result in penalties that may harm our business or reputation. We cannot be certain that compliant insurance coverage will remain available to us on reasonable terms, and we could face additional risks arising from future changes to the ACA or other legislation or executive orders that repeal and replace in whole or in part the ACA.

We incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could harm our results of operations and our ability to attract and retain qualified executives and board members.

As a public company, we have incurred and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting and corporate

governance requirements. These requirements include compliance with Section 404 and other provisions of the Sarbanes-Oxley Act of 2002, the Dodd-Frank Act, as well as rules implemented by the Securities and Exchange Commission (“SEC”), The NASDAQ Stock Market LLC, and other applicable securities or exchange-related rules and regulations. In addition, our management team has also had to adapt to the requirements of being a public company. Complying with these rules and regulations substantially increases our legal and financial compliance costs and makes some activities more difficult, time consuming or costly. These compliance requirements and costs will increase once we are no longer an “emerging growth company,” as defined in the JOBS Act, which will occur December 31, 2018 at the latest.

Government regulations of wireless networking in the United States or internationally may result in unanticipated costs and failure to comply with such laws and regulations could harm our business.

Our wireless communication and networking products operate through the transmission of radio signals and radio emissions are subject to regulation in the United States and in other countries in which we do business. In the United States, various federal agencies, including the Federal Communications Commission (“FCC”), and various state agencies have promulgated regulations that concern the use of radio/electromagnetic emissions standards. Member countries of the European Union have enacted similar standards concerning electrical safety and electromagnetic compatibility and emissions. As these regulations and standards evolve, and if new regulations or standards are implemented, we will be required to modify our products or develop and support new versions of our products, and our compliance with these regulations and standards may

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become more burdensome. The failure of our products to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay introduction of our products, which could harm our business. Our inability to alter our products to address these requirements and any regulatory changes may have a material adverse effect on our business, operating results and financial condition. In addition, dealer and end user uncertainty regarding future policies may also affect demand for wireless networking products, including our products.

## Risks Related to Our International Operations

In recent years, a significant amount of our revenue has come from sales outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.

We have a limited history of marketing, selling, and supporting our products and services internationally. However, international revenue (excluding Canada) accounted for 22% of our total revenue for the year ended December 31, 2017, and we expect that percentage may grow in the future. As a result, we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing, and retaining international dealers, distributors, and international staff, and specifically staff related to sales management and sales personnel, we may experience difficulties in productivity in foreign markets.

If we are not able to increase the sales of our solutions to consumers located outside of North America, our results of operations or revenue growth may be harmed. In addition, in connection with our expansion into foreign markets, we are a receiver of currencies other than the U.S. dollar. Accordingly, changes in exchange rates, and in particular a strengthening of the U.S. dollar, will negatively affect our net sales as expressed in U.S. dollars. There is also a risk that we will have to adjust local currency product pricing due to competitive pressures when there has been significant volatility in foreign currency exchange rates.

Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. Our limited experience in operating our business in certain countries outside of the United States increases the risk that our current and any future international expansion efforts will not be successful. Conducting international operations subjects us to risks that, generally, we do not face in the United States, including:

- Fluctuations in currency exchange rates;
- Unexpected changes in foreign regulatory requirements;

- Longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- Difficulties in managing and staffing international operations, including differences in labor laws, which may result in higher personnel-related liabilities and expenses;
- Potentially adverse tax consequences, including the complexities of foreign value added tax systems and restrictions on the repatriation of earnings;
- Localization of our solutions and other materials, including translation into foreign languages and associated expenses;
- Localization of applicable agreements under applicable foreign law and differing legal standards and risks;
- The burdens of complying with a wide variety of foreign laws and different legal standards, including laws and regulations related to import/export, privacy, the transfer of personal information across borders, and data security and limitations on liability;
- Increased financial accounting and reporting burdens and complexities;
- Political, social and economic instability abroad, terrorist attacks and security concerns in general, including crime and cyber security; and

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- Reduced or varied protection for intellectual property rights in some countries.

The impact of any one of these could harm our international business and, consequently, our results of operations generally. Additionally, operating in international markets also requires significant management attention and financial resources. We cannot be certain that the investment and additional resources required in establishing, acquiring or integrating operations and personnel in other countries will produce desired levels of revenue or profitability.

We conduct a significant amount of business in the European Union, including through our office located in England, and our operations may be affected by the results of the recent referendum vote by the United Kingdom to leave the European Union.

On June 23, 2016, the citizens of the United Kingdom approved a referendum to leave the European Union (“Brexit”), which led to significant political, economic and legal uncertainty. In addition, the Brexit vote triggered a devaluing of the pound sterling relative to the euro and the U.S. dollar, and in Europe we generally sell our products and incur expense in local currencies including the pound sterling and the euro, but incur exchange rate gains and losses for U.S. dollar denominated assets and liabilities including intercompany and third-party accounts receivables and payables. The pound has subsequently recovered some of its value against the dollar, and we enter into forward contracts to help offset our exposure to movements in foreign currency exchange rates relative to some of these U.S. dollar denominated balances; however, there is no guarantee that we will correctly anticipate the optimal amounts of such offsets in the future.

On March 29, 2017, the United Kingdom provided its official notice to the European Council that it intends to leave the European Union, triggering the two-year transitional period. The long-term nature of the United Kingdom’s relationship with the European Union after Brexit is completed is still unclear and there is considerable uncertainty when any relationship will be agreed and implemented. During this transitional period, negotiations will take place to unravel all of the existing legal, political and financial frameworks and obligations, and put new structures in place. At this stage, it is uncertain what the final results of these negotiations will be and, given the lack of comparable precedent, it is unclear how Brexit will affect economic conditions in the United Kingdom, the European Union, or globally, and Control4 specifically. Because Control4 has sales throughout the European Union and offices in England and Germany, it is possible that Brexit may require us to restructure some or all of our operations, and depending on what is negotiated, could impair our ability to transact business in other countries in the European Union. In addition, the fluctuation in currencies and market conditions may adversely affect our business, results of operations and financial condition.

Due to the global nature of our business, we could be harmed by violations of the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act or similar anti-corruption laws in other jurisdictions in which we operate, or various international trade and export laws.

The global nature of our business creates various domestic and local regulatory challenges. The U.S. Foreign Corrupt Practices Act (the “FCPA”), the U.K. Bribery Act 2010 (the “U.K. Bribery Act”), and similar anti-corruption laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business. In addition, U.S.-based companies are required to maintain records that accurately and fairly represent their transactions and have an adequate system of internal accounting controls. We operate in areas of the world that experience corruption by government officials to some degree and, in certain circumstances, compliance with anti-corruption laws may conflict with local customs and practices. Although we periodically train our employees and agents about these anti-corruption laws, we cannot assure that our training is effective in reducing the risks attendant to such anti-corruption laws. Our global operations require us to import from and export to several countries, which geographically stretches our compliance obligations. In addition, changes in such laws could result in increased regulatory requirements and compliance costs, which could harm our business, financial condition and results of operations. Our employees or other agents may engage in prohibited conduct and render us responsible under the FCPA, the U.K. Bribery Act or similar anti-corruption laws. If we are found to be in violation of the FCPA, the U.K. Bribery Act or other anti-corruption laws (either due to acts or inadvertence of our employees, or due to the acts or inadvertence of other parties), we could suffer criminal or civil penalties or other sanctions, which could harm our business.

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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 proprietary technology is essential to establishing and maintaining our leadership position. We seek to protect our intellectual property through trade secrets, confidentiality, non-compete, non-solicitation and nondisclosure agreements, and by registering numerous patents, trademarks, copyrights, and/or domain names in various jurisdictions, as well as using 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 obtain and 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 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. Any such action could result in significant costs and diversion of our resources and management's attention, and we cannot assure 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 and lead to expensive licenses or significant liabilities in the event of an adverse judgment.

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 subject to patent litigation in the past and we may be subject to similar litigation in the future. Given that our solution integrates with almost all network aware products, the risk that our solution may be subject to these allegations is exacerbated. As we seek to extend our solutions, we could be constrained by the intellectual property rights of others, including patent holding companies.

We are defendants in legal proceedings related to intellectual property rights from time to time (a summary of current litigation and outstanding claims that if determined adversely to us, we believe would have a material adverse effect

on our business, results of operations, financial condition or cash flows, if any, is set forth in Item 1 of Part II, Legal Proceedings), and in the past, we have entered into settlement agreements relating to contractual claims and alleged patent infringements, which have included future royalty payments on certain products, the payment of a lump sum amount for alleged past damages, and/or the payment of a fixed amount in exchange for a covenant not to sue.

We might not prevail in any current or future intellectual property infringement litigation given the complex technical issues and inherent uncertainties in such litigation. 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, or negotiate cross-licenses 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. If our 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 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 and results of operations. If we were compelled to withdraw any of our solutions from the market, our business, financial condition and results of operations could be harmed.

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We are generally obligated to indemnify our independent dealers, distributors and partners for certain expenses and liabilities resulting from intellectual property infringement claims regarding our products, which could force us to incur substantial costs.

We have agreed, and expect to continue to agree, to indemnify our independent dealers, distributors and other partners for certain intellectual property infringement claims regarding our products. As a result, in the case of infringement claims against these dealers, distributors and 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 dealers, distributors and partners may seek indemnification from us in connection with infringement claims brought against them. We evaluate each such request on a case-by-case basis and we may not succeed in refuting any such claim we believe to be unjustified. If a dealer, distributor or 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.

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

Some of our solutions use or incorporate software that is subject to one or more open source licenses. 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 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 solutions. In that event, we could be required to seek licenses from third parties in order to continue offering our solutions, to re-develop our solutions, to discontinue sales of our 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 operating results and financial condition, or require us to devote additional research and development resources to change our solutions.

We monitor the use of all open source software in our products, solutions, processes and technology, and seek to ensure that no open source software is used in such a way as to require us to disclose the source code to the related product or solution when we do not wish to do so. Despite these precautions, if a third-party software provider has incorporated certain types of open source software into software we license from such third-party provider for our solutions without our knowledge or if we have otherwise incorporated unfavorable open source software into our solutions, we could, under certain circumstances, be required to disclose the related source code to our solutions. This

could harm our intellectual property position and our business, results of operations and financial condition.

We rely on the availability of third-party licenses. If these licenses are available to us only on less favorable terms or not at all in the future, our business and results of operations may be harmed.

We have incorporated third-party licensed technology into our products. It may be necessary in the future to renew licenses relating to various aspects of these products or to seek additional licenses for existing or new products. The necessary licenses may not be available on acceptable terms, or at all. The inability to obtain certain licenses or other rights, or to obtain those licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in our inability to include certain features in our products or delays in product releases until such time, if ever, as equivalent technology could be identified, licensed or developed and integrated into our products, which may have a material adverse effect on our business, results of operations and financial condition. Moreover, the inclusion in our products of intellectual property licensed from third parties on a nonexclusive basis could limit our ability to protect our proprietary rights in our products.

#### Risks Related to Owning Our Common Stock

Our share price may be volatile, which may result in securities class action litigation against us.

The market price of our common stock has been and again could be subject to wide fluctuations in response to many

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risk factors listed in this section and other factors beyond our control, including but not limited to:

- Actual or anticipated fluctuations in our financial condition and results of operations;
- Overall conditions in our industry and market;
- Addition or loss of independent dealers, distributors or consumers;
- Changes in laws or regulations applicable to our solutions;
- Actual or anticipated changes in our growth rate relative to our competitors;
- Announcements by us, our competitors or strategic buyers of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- Additions or departures of key personnel;
- Competition from existing products or new products that may emerge;
- Issuance of new or updated research or reports by securities analysts, activist investors and those who short our stock;
- Fluctuations in the valuation of companies perceived by investors to be comparable to us;
- Disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain intellectual property protection for our technologies;
- Actual or threatened litigation or adverse regulatory action against us;
- Trading of our common stock by us or our stockholders, or issuance of new shares;
- Share price and volume fluctuations attributable to inconsistent trading volume levels of our shares; and

- General economic, geopolitical and market conditions.

Furthermore, 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 often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, geopolitical and market conditions such as recessions, interest rate changes or international currency and capital markets fluctuation, may harm the market price of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could harm our business.

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 our business. We do not have any control over these analysts, activist investors, or those who short our stock. If one or more of the foregoing analysts who cover us, activist investors, or those who short our stock downgrade our shares, change their opinion of our shares, or publish negative or false reports for their own purposes, our share price will likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish research or reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

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The concentration of ownership of our capital stock limits your ability to influence corporate matters.

As of December 31, 2017, our directors, executive officers and holders of more than 5% of our common stock, together with their affiliates, beneficially own, in the aggregate, 26% of our outstanding common stock. As a result, these stockholders, acting together, may have the ability to significantly influence the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, these stockholders, acting together, control or significantly influence most matters related to the management and affairs of our company. Accordingly, this concentration of ownership and managerial authority might harm the market price of our common stock by:

- Delaying, deferring or preventing a change in corporate control;
- Impeding a merger, consolidation, takeover or other business combination involving us; or
- Discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent 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 amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated include provisions that:

- Authorize our board of directors to issue, without further action by the stockholders, up to 25,000,000 shares of undesignated preferred 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;
- Specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the Board, the Chief Executive Officer or the President;
- Establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;

- Provide that directors may be removed only for cause;
- Provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- Establish that our board of directors is divided into three classes—Class I, Class II and Class III—with each class serving staggered terms; and
- Require a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control. These provisions may also 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.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our outstanding common stock.

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Any provision of our certificate of incorporation or bylaws or Delaware law that has the effect of delaying or deterring a change of control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 2. Properties

Our corporate headquarters are located in Salt Lake City, Utah, where we lease approximately 85,000 square feet of commercial space under a lease that expires on June 30, 2018. We are currently in the process of renegotiating this lease. We use this space for sales, research and development, dealer and distributor service and support, and administrative purposes. We also lease approximately 60,000 square feet of warehouse space in Salt Lake City, Utah under a lease that expires on March 31, 2019.

In connection with our sales efforts in the United States and abroad, we lease office space typically on a short-term renewable basis domestically in San Jose, California; Charlotte, North Carolina; Hayward, CA; Orange County, CA; and Chicago, Illinois, and internationally in York, United Kingdom; Shanghai, China; Melbourne, Australia; Frankfurt, Germany; and New Belgrade, Serbia. Furthermore, in connection with the acquisition of Triad Speakers in February 2017, we have added warehouse space in Portland, Oregon, and in connection with the acquisition of ihiji, Inc. in December 2017, we have added office space in Austin, Texas, both under short-term, renewable leases.

We believe that our facilities are suitable to meet our current needs. We intend to expand our existing facilities or add new facilities as we add employees and enter new geographic markets, and we believe that suitable additional or alternative space will be available as needed to accommodate any such growth. However, we expect to incur additional expenses in connection with such new or expanded facilities.

ITEM 3. Legal Proceedings

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any legal proceeding that, if determined adversely to us, we believe would individually or in the aggregate have a material adverse effect on our business, results of operations, financial condition or cash flows.

ITEM 4. Mine Safety Disclosures

Not applicable.

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PART II.

ITEM 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock has been listed on the NASDAQ Global Select Market under the symbol “CTRL” since August 2, 2013. Prior to that time, there was no public market for our common stock.

Price Range of Common Stock

The price range per share of common stock presented below represents the highest and lowest closing prices for our common stock on the NASDAQ Global Select Market during each quarter since our initial public offering. On February 9, 2018, the last reported sale price for our common stock on the NASDAQ Global Select Market was \$24.12 per share.

2017	High	Low
Fourth Quarter	\$ 35.76	\$ 26.87
Third Quarter	\$ 29.46	\$ 19.27
Second Quarter	\$ 20.88	\$ 14.82
First Quarter	\$ 16.00	\$ 10.58

2016	High	Low
Fourth Quarter	\$ 12.28	\$ 9.98
Third Quarter	\$ 12.28	\$ 8.03
Second Quarter	\$ 8.50	\$ 7.13
First Quarter	\$ 9.07	\$ 5.67

Holder of Record

As of February 9, 2018, there were 17 holders of record of our common stock. The actual number of stockholders is greater than this number of holders of record, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

#### Stock Performance Graph and Cumulative Total Return

Notwithstanding any statement to the contrary in any of our previous or future filings with the SEC, the following information relating to the price performance of our common stock shall not be deemed to be “filed” with the SEC or to be “soliciting material” under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and it shall not be deemed to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except to the extent we specifically incorporate it by reference into such filing.

The following graph shows a comparison from August 2, 2013 (the date our common stock commenced trading on the NASDAQ Global Select Market) through December 31, 2017 of the total cumulative return of our common stock with the total cumulative return of the S&P 500 Index and S&P 500 Information Technology Sector Index. The comparisons in this graph below are based on historical data and are not intended to forecast or be indicative of future performance of our common stock.

The comparison assumes that \$100.00 was invested in our common stock, the S&P 500 Index and S&P 500 Information Technology Sector Index, and assumes reinvestment of dividends, if any. The graph assumes the initial value of our common stock on August 2, 2013 was the closing sale price on that day of \$20.05 per share and not the initial offering price to the public of \$16.00 per share. The performance shown on the graph below is based on historical results and is not intended to suggest future performance.

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Dividend Policy

We have never declared or paid any cash dividends on our common stock and 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 operation 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. 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.

Unregistered Sale of Equity Securities

None.

Issuer Purchases of Equity Securities

In May 2015, our Board of Directors authorized the repurchase of up to \$20 million in Control4 common stock from time to time on the open market. During the fiscal quarter ended December 31, 2017, we did not repurchase any outstanding common stock under the share repurchase program. All shares of common stock held in treasury were retired as of December 31, 2017.

In February 2018, the Company's Board of Directors authorized the expansion of the repurchase program providing approval for the Company to repurchase up to \$20 million in Control4 common stock from time to time on the open market. Any shares repurchased will be in compliance with applicable legal requirements, at prices determined to be attractive and in the best interests of both the company and its stockholders.

Securities Authorized for Issuance under Equity Compensation Plans

See Part III, Item 12 of this Form 10-K for disclosure relating to our equity compensation plans. Such information will be included in our proxy statement relating to our 2018 annual meeting of stockholders, which is incorporated herein by reference.



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ITEM 6. Selected Financial Data

We have derived the selected consolidated statements of operations data for the years ended December 31, 2017, 2016 and 2015 and the selected consolidated balance sheet data as of December 31, 2017 and 2016 from our audited consolidated financial statements and related notes included elsewhere in this Form 10-K. We have derived the selected consolidated statements of operations data for the years ended December 31, 2014 and 2013 and the selected consolidated balance sheet data as of December 31, 2015, 2014 and 2013 from our audited consolidated financial statements not included in this Form 10-K. The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this Form 10-K. Our historical results are not necessarily indicative of the results to be expected for any future period and the results for any interim period are not necessarily indicative of the results to be expected in the full year.

Years Ended December 31,  
2017 2016 2015 2014