UNIVERSAL ELECTRONICS INC

Form 10-K March 15, 2019 Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

FOR ANNUAL AND TRANSITION REPORTS

PURSUANT TO SECTIONS 13 OR

15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2018

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: 0-21044

UNIVERSAL ELECTRONICS INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware 33-0204817 (State or Other Jurisdiction of Incorporation or Organization) 33-0204817 (I.R.S. Employer Identification No.)

15147 N. Scottsdale Road, Suite H300

85254-2494

Scottsdale, Arizona

(Address of Principal Executive Offices) (Zip Code)

(Address of Timelpar Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (480) 530-3000

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

Common Stock, par value \$.01 per share The NASDAQ Stock Market LLC

(Title of Class) (Name of each exchange on which registered)

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

None

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

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 \circ

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

Non-accelerated filer "Smaller reporting company "

Emerging growth company "

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant on June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter was \$244,562,266 based upon the closing sale price of the Company's common stock as reported on the NASDAQ Stock Market for that date.

On March 11, 2019, 13,842,562 shares of Common Stock, par value \$.01 per share, of the registrant were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the registrant's notice of annual meeting of shareowners and proxy statement to be filed pursuant to Regulation 14A within 120 days after registrant's fiscal year end of December 31, 2018 are incorporated by reference into Part III of this Form 10-K. The Proxy Statement will be filed with the Securities and Exchange Commission no later than April 30, 2019.

Except as otherwise stated, the information contained in this Form 10-K is as of December 31, 2018.

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UNIVERSAL ELECTRONICS INC.

For the Fiscal Year Ended December 31, 2018

Annual Report on Form 10-K

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PART I

ITEM 1. BUSINESS

Business of Universal Electronics Inc.

Universal Electronics Inc. ("UEI") was incorporated under the laws of Delaware in 1986 and began operations in 1987. The principal executive offices are located at 15147 N. Scottsdale Road, Suite H300, Scottsdale, Arizona 85254-2494. As used herein, the terms "we", "us" and "our" refer to UEI and its subsidiaries unless the context indicates to the contrary.

Additional information regarding UEI may be obtained at www.uei.com. Our website address is not intended to function as a hyperlink and the information available at our website address is not incorporated by reference into this Annual Report on Form 10-K. We make our periodic and current reports, together with amendments to these reports, available on our website, free of charge, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the U.S. Securities and Exchange Commission ("SEC"). The SEC maintains a website at www.sec.gov that contains the reports, proxy and other information that we file electronically with the SEC. Business Segment

Overview

Universal Electronics Inc. develops control and sensor technology solutions and manufactures a broad line of pre-programmed and universal control products, audio-video ("AV") accessories, and intelligent wireless security and smart home products dedicated to redefining the home entertainment, automation and security experience. Our offerings include:

easy-to-use, pre-programmed universal infrared ("IR") and radio frequency ("RF") remote controls that are sold primarily to subscription broadcasting providers (cable, satellite and Internet Protocol television ("IPTV")), original equipment manufacturers ("OEMs"), retailers, and private label customers;

integrated circuits, on which our software and universal device control database is embedded, sold primarily to OEMs, subscription broadcasting providers, and private label customers;

software, firmware and technology solutions that can enable devices such as TVs, set-top boxes, audio systems, smartphones, tablets, game controllers and other consumer electronic devices to wirelessly connect and interact with home networks and interactive services to control and deliver digital entertainment and information;

intellectual property which we license primarily to OEMs, software development companies, private label customers, and subscription broadcasting providers;

• proprietary and standards-based RF sensors designed for residential security, safety and automation applications;

wall-mount and handheld thermostat controllers and connected accessories for intelligent energy management systems, primarily to OEM customers as well as hospitality system integrators; and

AV accessories sold, directly and indirectly, to consumers.

Our business is comprised of one reportable segment.

Principal Products and Markets

Our principal markets are the subscription broadcast, consumer and mobile electronics and residential security markets where our customers include subscription broadcasters, OEMs, international retailers, private label brands, pro-security dealers and companies in the computing industry.

We provide subscription broadcasting providers, both domestically and internationally, with our universal remote control devices and integrated circuits, on which our software and device code libraries are embedded. We also sell integrated circuits, on which our software and device control code libraries are embedded, and license our device control database to OEMs that manufacture televisions, digital audio and video players, streamer boxes, cable converters, satellite receivers, set-top boxes, room and central heating, ventilation and air conditioning ("HVAC") equipment, game consoles, and wireless mobile phones and tablets.

We continue to place significant emphasis on expanding our sales and marketing efforts to subscription broadcasters and OEMs in Asia, Latin America and Europe. We currently own and operate vertically integrated manufacturing and assembly factories in the People's Republic of China ("PRC"), Mexico and Brazil, which allow us the ability to produce in the regional markets and to scale our production to meet growing customer demand.

Leveraging our scale and expertise in low-power RF microcontrollers, we continue to pursue further penetration of the more traditional OEM consumer electronics markets as well as newer product categories in the smart home and Internet of Things ("IoT") markets such as lighting, window coverings, and bathroom controllers. Customers in these markets integrate our solutions

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and technology into their products to enhance their consumer lifestyle ecosystems. Growth in these markets has been driven by the increasing demand for more energy efficient homes and the increasing proliferation of connected smart devices.

In 2015, we acquired Ecolink Intelligent Technology, Inc. ("Ecolink"), a leading developer of safety and security products. Ecolink provides a wide range of intelligent wireless security and automation components dedicated to redefining the home security experience. Ecolink has over 20 years of wireless engineering expertise in the home security and automation market and currently holds more than 50 related pending and issued patents. UEI's current subscription broadcasting customers are adding home security and automation to their list of service offerings. Our acquisition of Ecolink, a premise equipment supplier to this market, enables us to broaden our design expertise and product portfolio to add home security and automation sensors to our capabilities.

On April 6, 2017, we acquired Residential Control Systems, Inc. ("RCS"), a U.S.-based designer and manufacturer of energy management and control products for the residential, small commercial and hospitality markets. The acquisition of RCS allows us to expand our product offering to include smart thermostat, sensing and monitoring products and enables us to broaden our technology and design expertise in these product categories. Smart and connected thermostats are critical components of the smart home that help deliver energy-efficiency and an enhanced consumer lifestyle.

For the years ended December 31, 2018, 2017, and 2016, our sales to Comcast accounted for 17.6%, 23.0%, and 22.9% of our net sales, respectively. For the years ended December 31, 2017 and 2016 our sales to AT&T (formerly DIRECTV) and its sub-contractors collectively accounted for 11.2%, and 11.5% of our net sales, respectively. Our One For All® brand name of remote controls and audio video accessories sold within the international retail markets accounted for 7.4%, 7.1%, and 7.2% of our total net sales for the years ended December 31, 2018, 2017, and 2016, respectively.

Intellectual Property and Technology

We hold a number of patents in the United States and abroad related to our products and technology, and have filed domestic and foreign applications for other patents that are pending. At the end of 2018, we had approximately 500 issued and pending United States patents related to remote control, home security, safety and automation as well as hundreds of foreign counterpart patents and applications in various territories around the world.

Our patents have remaining lives ranging from one to 18 years. We have also obtained copyright registration and claim copyright protection for certain proprietary software and libraries of our device control codes. Additionally, the names of many of our products are registered, or are being registered, as trademarks in the United States Patent and Trademark Office and in most of the other countries in which such products are sold. These registrations are valid for terms ranging up to 20 years and may be renewed as long as the trademarks continue to be used and are deemed by management to be important to our operations. While we follow the practice of obtaining patent, copyright and trademark registrations on new developments whenever advisable, in certain cases we have elected common law trade secret protection in lieu of obtaining such other protection.

A key factor in creating products and software for control of entertainment devices is the device control code database. Since our beginning in 1986, we have compiled an extensive device control code database that covers over one million individual device functions and approximately 8,600 individual consumer electronic equipment brand names, including virtually all IR controlled set-top boxes, televisions, audio components, digital video players, such as, Blu-Ray/-DVD and streaming media players such as Roku® and AppleTV®. Our technology also includes other remote controlled home entertainment devices and home automation control modules, as well as wired Consumer Electronics Control ("CEC") and wireless Internet Protocol ("IP") control protocols commonly found on many of the latest HDMI and internet connected devices. Our proprietary software automatically detects, identifies and enables the appropriate control commands for any given home entertainment, automation and air conditioning device in the home. Our libraries are continuously updated with device control codes used in newly introduced AV and IoT devices. These control codes are captured directly from original remote control devices or from the manufacturer's written specifications to ensure the accuracy and integrity of the database. Our proprietary software and know-how permit us to offer a device control code database that is more robust and efficient than similarly priced products of our competitors.

Our goal is to provide universal control solutions that require minimal or no user set-up and deliver consistent and intuitive one-touch control of all connected content sources and devices. QuickSet® is a software application that is currently embedded or enabled, via a Cloud service, in over 500 million devices worldwide. QuickSet may be embedded in an AV device, set-top box, or other host device, or delivered as a Cloud-based service to enable universal remote setup and control. QuickSet enables universal device control set-up using automated and guided on-screen instructions and a wireless two-way communication link between the remote and the QuickSet enabled device. The two-way connection allows device control code data and configuration settings to be sent to the remote control from the device and greatly simplifies the universal control set-up process and can enable other time saving features. QuickSet utilizes data transmitted over HDMI or IP networks to automatically detect various attributes of the connected device and downloads the appropriate control codes and functions into the remote control without the need for the user to enter any additional information. The user does not need to know the brand or model number to set up the device in the remote.

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Any compatible new device that is connected is recognized. Consumers can quickly and easily set up their control interface to control multiple devices. Recently added features in QuickSet address common consumer challenges in universal device control, such as mode confusion and input switching. With QuickSet, consumers switch easily between activities and reliably view their chosen content source with a single touch. QuickSet handles the device-specific control. A QuickSet user experience can be delivered via a tactile remote, touchscreen interface, on-screen graphical user interface ("GUI") or voice-enabled system. Licensees of QuickSet include service providers such as Comcast, AT&T and Echostar Technologies; smart TV manufacturers such as Sony and Samsung; leading game console manufacturer Microsoft on its Xbox One game system; and several Chinese mobile handset platforms. QuickSet Cloud is an end-to-end platform for discovery, control, and interaction with devices including rules and automation framework for a truly connected home experience. Leveraging the largest knowledge graph of devices, services are offered through QuickSet Cloud and QuickSet SDK delivery methods with edge intelligence built in and cloud scalability capabilities.

Smart devices are becoming a more prevalent part of the home entertainment experience, and UEI offers several solutions to enable entertainment device control with a smart phone, tablet or smart TV. In its smart device control solutions, UEI offers all of the elements needed for device control ranging from IR and RF controller chips to device control libraries to graphical and voice user interfaces, as well as artificial intelligence systems that deliver context aware device interactions. Designed for Android, Nevo® Home is UEI's device and service discovery and control application, currently available for download at Google Play.

In 2018, UEI introduced Nevo.AI, a digital assistant for the connected home with a natural language interface to allow interaction with devices within the home using QuickSet's underlying capabilities. Features are expandable through Enterprise Integration and Ecosystem of Partner Services.

In 2019, we will introduce Nevo® Butler, a turnkey smart home hub with Nevo.AI & QuickSet pre-integrated. Offered as managed hardware with security built in from manufacturing through the life cycle, it is capable of natively running Nevo Assistant, as well as other digital assistants.

Methods of Distribution

Distribution methods for our control solutions vary depending on the sales channel. We distribute remote control devices, sensors, connected thermostats and AV accessories directly to subscription broadcasters and OEMs, both domestically and internationally. We also distribute home security sensors to pro-security installers in the United States through a network of dealers. Additionally, we sell our wireless control devices and AV accessories under the One For All® and private label brand names to retailers through our international subsidiaries and direct to retailers in key markets, such as in the United Kingdom, Germany and the United States. We utilize third-party distributors for the retail channel in countries where we do not have subsidiaries.

We have developed a broad portfolio of patented technologies and the industry's leading database of device setup and control software. We ship integrated circuits, on which our software and control code database are embedded, directly to manufacturers for inclusion in their products. In addition, we license our software and technology to manufacturers. Licenses are delivered upon the transfer of a product master or on a per unit basis when the software or technology is used in a customer device.

We provide domestic and international consumer support to our various universal control marketers, including manufacturers, cable and satellite providers, retail distributors, and audio and video OEMs through our live and automated call centers. We also make available a web-based support resource, www.urcsupport.com, designed specifically for subscription broadcasters. This solution offers videos and online tools to help users easily set up their universal remote controls, and as a result reduce call volume at customer support centers. Additionally, the UEI Technical Support Services call center provides customer interaction management services from technical service and support to customer retention. Services include pre-repair calls, post-install surveys, and inbound calls for cable customers to provide greater bottom-line efficiencies.

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Our 24 international subsidiaries are the following:

C.G. Development Ltd., established in Hong Kong;

€G Mexico Remote Controls, S.R.L. de C.V., established in Mexico;

Enson Assets Ltd., established in the British Virgin Islands;

Gemstar Polyfirst Ltd., established in Hong Kong;

Gemstar Technology (Qinzhou) Co. Ltd., established in the PRC;

Gemstar Technology (Yangzhou) Co. Ltd., established in the PRC;

Guangzhou Universal Electronics Service Co., Ltd., established in the PRC;

One For All Argentina S.R.L., established in Argentina;

One For All France S.A.S., established in France;

One For All GmbH, established in Germany;

One for All Iberia S.L., established in Spain;

One For All UK Ltd., established in the United Kingdom;

UE Japan Ltd., established in Japan;

UE Singapore Pte. Ltd., established in Singapore;

UEI Cayman Inc., established in the Cayman Islands;

UEI do Brasil Controles Remotos Ltda., established in Brazil;

UEI Electronics Pte. Ltd., established in India;

UEI Hong Kong Pte. Ltd., established in Hong Kong;

UE Korea Ltd., established in South Korea;

Universal Electronics B.V., established in the Netherlands;

Universal Electronics Italia S.R.L., established in Italy;

Universal Electronics Trading Co., Ltd., established in the PRC;

Universal Electronics Yangzhou Co. Ltd., established in the PRC; and

Yangzhou Universal Trading Co. Ltd., established in the PRC.

Raw Materials and Dependence on Suppliers

We utilize our own manufacturing plants and third-party manufacturers and suppliers primarily located within the PRC, Mexico and Brazil to produce our control and sensor products. In 2017 and 2016, Texas Instruments provided 10.0% and 11.7%, respectively, of our total inventory purchases. In 2018, no single supplier provided more than 10% of our total inventory purchases.

Even though we operate two factories in the PRC and manufacturing and assembly plants in Brazil and Mexico, we continue to evaluate additional contract manufacturers and sources of supply. During 2018, we utilized multiple contract manufacturers and maintained duplicate tooling for certain of our products. Where possible we utilize standard parts and components, which are available from multiple sources.

In 2018, to avoid the U.S. government-imposed tariffs on products made in China and imported into the United States, we began to move production of many of our products destined for the United States to Mexico and a third-party manufacturing partner outside of China. We expect this transition to continue during the first half of 2019. We continually seek additional sources to reduce our dependence on our integrated circuit suppliers. To further manage our integrated and system on a chip ("SOC") circuit supplier dependence, we include flash microcontroller technology in most of our products. Flash microcontrollers can have shorter lead times than standard microcontrollers and may be reprogrammed, if necessary. This allows us flexibility during any unforeseen shipping delays and has the added benefit of potentially reducing excess and obsolete inventory exposure. This diversification lessens our dependence on any one supplier and allows us to negotiate more favorable terms. Seasonality

Historically, our business has been influenced by the retail sales cycle, with increased sales in the second half of the year. We expect this pattern to be repeated during 2019.

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See "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 23" for further details regarding our quarterly results.

Competition

Our principal competitors in the subscription broadcasting market are Remote Solutions, Omni Remotes (formerly Philips Home Control Singapore PTE, Ltd.), SMK, and Ruwido. In the international retail and private label markets for wireless controls we compete primarily with Logitech and Sony, as well as various manufacturers of wireless controls in Asia. Our primary competitors in the OEM market are the original equipment manufacturers themselves and various wireless control manufacturers in Asia. In home security, safety and automation, we offer universal sub-gigahertz products that are compatible with the top security panel manufacturers, such as Honeywell, GE, Tyco/DSC and 2GIG. In the connected smart home market we compete with the OEMs themselves as well as wireless manufacturers in North America, such as Nortek, and other original design manufacturers in Asia. We compete in our markets on the basis of product quality, features, price, intellectual property, design and development expertise and customer support. We believe that we will need to continue to introduce new and innovative products and software solutions to remain competitive and to recruit and retain competent personnel to successfully accomplish our future objectives.

Engineering, Research and Development

During 2018, our engineering efforts focused on the following:

broadening our product portfolio;

•aunching new embedded software solutions designed to simplify set-up and control features;

modifying existing products and technologies to improve features and lower costs;

formulating measures to protect our proprietary technology and general know-how;

improving our control solutions software;

updating our library of device codes to include codes for new features and devices introduced worldwide; and ereating innovative products that address consumer challenges in home entertainment control and security sensing.

In 2018, UEI was awarded a 2017 Technical & Engineering Emmy® Award from The National Academy of Television Arts & Sciences (NATAS) for its work relating to voice navigation technologies for discovering and interacting with TV content. UEI was selected for its excellence in engineering and creativity that has materially affected the television viewing experience.

During 2018, our advanced engineering efforts focused on further developing our existing products, services and technologies. We released software updates to our embedded QuickSet application, and continued development initiatives around emerging RF technologies, such as RF4CE, Bluetooth, and Bluetooth Smart. We added new products to our portfolio of low power dual-RF chips that are deployed across a range of our custom and standard products, allowing for broader flexibility and easier implementation of multiple communication protocols. Additionally, we released many new advanced remote control products that incorporate voice search capabilities in our subscription broadcast and OEM channels.

During 2018, we also invested resources to develop a new product, Nevo® Butler, an end-to-end voice-enabled smart home hub with a built-in white label digital assistant that promises to unify the entertainment control and home automation experiences, enabling interoperability across fragmented ecosystems. Built-in entertainment control capabilities and smart home hub features powered by QuickSet® Cloud make this device the most versatile assistant for the home, capable of addressing the widest range of current installed base of devices in consumers' homes, addressing a range of use cases and innovative new services in the smart home.

Our personnel are involved with various industry organizations and bodies, which are in the process of setting standards for IR, RF, telephone and cable communications and networking in the home. Because of the nature of research and development activities, there can be no assurance that any of our research and development projects will be successfully completed or ultimately achieve commercial success.

Our expenditures on engineering, research and development were:

(In millions): 2018 2017 2016

Research and development \$23.8 \$21.4 \$19.9 Engineering ⁽¹⁾ 14.1 11.0 10.5 Total engineering, research and development \$37.9 \$32.4 \$30.4

Engineering costs are included in selling, general and administrative expenses.

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Environmental Matters

Many of our products are subject to various federal, state, local and international laws governing chemical substances in products, including laws regulating the manufacturing and distribution of chemical substances and laws restricting the presence of certain substances in electronics products. We may incur substantial costs, including cleanup costs, fines and civil or criminal sanctions, third-party damages or personal injury claims, if we were to violate or become liable under environmental laws or if our products become non-compliant with environmental laws. We also face increasing complexity in our product design and procurement operations as we adjust to new and future requirements relating to the materials composition of our products.

We may also face significant costs and liabilities in connection with product take-back legislation. The European Union's Waste Electrical and Electronic Equipment Directive ("WEEE") makes producers of electrical goods financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. Our European subsidiaries are WEEE compliant. Similar legislation has been or may be enacted in other jurisdictions, including in the United States, Canada, Mexico, the PRC and Japan.

We believe that we have materially complied with all currently existing international and domestic federal, state and local statutes and regulations regarding environmental standards and occupational safety and health matters to which we are subject. During the years ended December 31, 2018, 2017 and 2016, the amounts incurred in complying with federal, state and local statutes and regulations pertaining to environmental standards and occupational safety and health laws and regulations did not materially affect our earnings or financial condition. However, future events, such as changes in existing laws and regulations or enforcement policies, may give rise to additional compliance costs that may have a material adverse effect upon our capital expenditures, earnings or financial condition.

At December 31, 2018, we employed 3,707 employees, of which 629 worked in engineering and research and development, 116 in sales and marketing, 96 in consumer service and support, 2,573 in operations and warehousing and 293 in executive and administrative functions. In addition, our factories in the PRC and our Asian operations engaged an additional 5,942 staff contracted through agency agreements.

Labor unions represent approximately 33.5% of our 3,707 employees at December 31, 2018. Some unionized workers, employed in Manaus, Brazil, are represented under contract with the Sindicato dos Trabalhadores nas Industrias Metalugicas, Mecanicas e de Materiais Eletricos de Manaus. Other unionized workers, employed in Monterrey, Mexico, are represented under contract with the Sindicato Industrial de Trabajadores de Nuevo León adherido a la Federación Nacional de Sindicatos Independientes. Our business units are subject to various laws and regulations relating to their relationships with their employees. These laws and regulations are specific to the location of each business unit. We believe that our relationships with employees and their representative organizations are good.

Executive Officers of the Registrant⁽¹⁾

The following table sets forth certain information concerning our executive officers on March 14, 2019:

Name Age Position

Paul D. Arling 56 Chairman of the Board and Chief Executive Officer

David Chong 57 Executive Vice President, Asia

Richard A. Firehammer, Jr. 61 Senior Vice President, General Counsel and Secretary Bryan M. Hackworth 49 Senior Vice President and Chief Financial Officer

Menno V. Koopmans 43 Managing Director, EMEA

Paul D. Arling is our Chairman and Chief Executive Officer. He joined us in May 1996 as Chief Financial Officer and was named to our Board of Directors in August 1996. He was appointed President and Chief Operating Officer in September 1998, was promoted to Chief Executive Officer in October 2000 and appointed as Chairman in July 2001. At the 2018 Annual Meeting of Stockholders, Mr. Arling was re-elected as our Chairman to serve until the 2019 Annual Meeting of Stockholders. From 1993 through May 1996, he served in various capacities at LESCO, Inc. (a

⁽¹⁾ Included pursuant to Instruction 3 to Item 401(b) of Regulation S-K.

manufacturer and distributor of professional turf care products). Prior to LESCO, he worked for Imperial Wall coverings (a manufacturer and distributor of wall covering products) as Director of Planning and The Michael Allen Company (a strategic management consulting company) where he was employed as a management consultant.

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David Chong is our Executive Vice President, Asia. He is responsible for general management of our Asia region. Mr. Chong joined us in January 2009 as Senior Vice President of Global OEM. Prior to joining us, Mr. Chong served as Senior Vice President at Philips Consumer Electronics Division and as the Chief Marketing Officer of the business group Philips Display (Philips TV and computer monitor business). At Philips Display, he led the re-engineering of the Product Creation, Marketing and Sales Organization to compete successfully in the LCD TV space. Prior to this, he also served as Vice President and General Manager of the Audio Video Business in Asia, Vice President and Global Business Line Manager for Audio and various senior management positions at Philips' CE Division. Mr. Chong started at Philips Research Lab in 1984 as a research scientist working in the area of VLSI design methodologies. He also served as Managing Director for Asia at InVue Security Product before joining us at the present position. Mr. Chong had his senior education in The United Kingdom, holding a B.S. in Electrical and Electronics Engineering with High Honors from University of Nottingham.

Richard A. Firehammer, Jr., Esq. is our Senior Vice President, General Counsel and Secretary. He joined us in October 1993 as General Counsel. He became our Secretary in February 1994. He was our Vice President from May 1997 until August 1998, and served as counsel to us from September 1998 until February 1999 at which time he was promoted to his current position. From November 1992 to September 1993, he was associated with the Chicago, Illinois law firm, Shefsky & Froelich, Ltd. From 1987 to 1992, he was with the law firm Vedder, Price, Kaufman & Kammholz in Chicago, Illinois.

Bryan M. Hackworth is our Senior Vice President and Chief Financial Officer. He was promoted to Chief Financial Officer in August 2006. Mr. Hackworth joined us in June 2004 as Corporate Controller and subsequently assumed the role of Chief Accounting Officer in May 2006. Before joining us in 2004, he spent five years at Mars, Inc., a privately held international manufacturer and distributor of consumer products and served in several financial and strategic roles (Controller — Ice Cream Division; Strategic Planning Manager for the WHISKA®Brand) and various other financial management positions. Prior to joining Mars, Inc., Mr. Hackworth spent six years at Deloitte & Touche LLP as an auditor, specializing in the manufacturing and retail industries.

Menno V. Koopmans is our Managing Director, EMEA. From 2014 to the end of 2016, he was our Senior Vice President for subscription broadcasting business in Europe and India where he led the customer transition into smart remote controls. From 2005 until 2013, he was the head of our worldwide consumer business and our One For All® brand. Prior to joining us, Mr. Koopmans worked at Mars, Sony Europe and Royal Philips Electronics in different product, marketing and sales management roles in both fast-moving consumer goods and durable consumer goods categories. Mr. Koopmans received his Masters in Science of Business Administration from Erasmus University in Rotterdam, The Netherlands.

ITEM 1A. RISK FACTORS

Forward-Looking Statements

We make forward-looking statements in Management's Discussion and Analysis of Financial Condition and Results of Operations and elsewhere in this report based on the beliefs and assumptions of our management and on information currently available to us. Forward-looking statements include information about our possible or assumed future results of operations, which follow under the headings "Business", "Liquidity and Capital Resources", and other statements throughout this report preceded by, followed by or that include the words "believes", "expects", "anticipates", "intends", "plans", "estimates" or similar expressions.

Any number of risks and uncertainties could cause actual results to differ materially from those we express in our forward-looking statements, including the risks and uncertainties we describe below and other factors we describe from time to time in our periodic filings with the U.S. Securities and Exchange Commission (the "SEC"). We therefore caution you not to rely unduly on any forward-looking statement. The forward-looking statements in this report speak only as of the date of this report, and we undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future developments, or otherwise.

Risks and Uncertainties

We are subject to various risks that could materially and adversely affect our business, results of operations, cash flow, liquidity, or financial condition. You should understand that these risks could cause results to differ materially from those we express in forward-looking statements contained in this report or in other Company communications, including those we file from time to time with the SEC. Because there is no way to determine in advance whether, or to what extent, any present uncertainty will ultimately impact our business, you should give equal weight to each of the following:

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Adverse Changes in General Business and Economic Conditions in the United States and Worldwide May Adversely Affect Our Results of Operations, Cash Flow, Liquidity or Financial Condition

Our business is sensitive to global and regional business and economic conditions. Adverse changes in such conditions in the United States and worldwide may reduce the demand for some of our products and impair the ability of those with whom we do business to satisfy their obligations to us, each of which could adversely affect our results of operations, cash flow, liquidity or financial condition. Higher inflation rates, interest rates, tax rates and unemployment rates, higher labor and healthcare costs, recessions, changing governmental policies, laws and regulations, and other economic factors could also adversely affect demand for some of our products and our results of operations, cash flow, liquidity or financial condition and that of our customers, vendors and suppliers.

A Weakening or Reversal of the General Economic Recovery in the United States and Other Countries and Regions in Which we Do Business, or the Continuation or Worsening of Economic Downturns in Other Countries and Regions, May Adversely Affect Our Results of Operations, Cash Flow, Liquidity or Financial Condition

Global economic uncertainty continues to exist. A weakening or reversal of the general economic recovery in the United States and other countries and regions in which we do business, or the continuation or worsening of economic downturns in other countries and regions, may adversely impact our net sales, the collection of accounts receivable, funding for working capital needs, expected cash flow generation from current and acquired businesses, and our investments, which may adversely impact our results of operations, cash flow, liquidity or financial condition.

We finance a portion of our sales through trade credit. Credit markets remain tight, and some customers who require financing for their businesses have not been able to obtain necessary financing. A continuation or worsening of these conditions could limit our ability to collect our accounts receivable, which could adversely affect our results of operations, cash flow, liquidity or financial condition.

We generally fund a portion of our seasonal working capital needs and obtain funding for other general corporate purposes through short-term borrowings backed by our revolving credit facility and other financing facilities. If any of the banks in these credit and financing facilities are unable to perform on their commitments, such inability could adversely impact our cash flow, liquidity or financial condition, including our ability to obtain funding for working capital needs and other general corporate purposes.

Although we currently have available credit facilities to fund our current operating needs, we cannot be certain we will be able to replace our existing credit facilities or refinance our existing or future debt when necessary. Our cost of borrowing and ability to access the capital markets are affected not only by market conditions, but also by our debt and credit ratings assigned by the major credit rating agencies. Downgrades in these ratings will increase our cost of borrowing and could have an adverse effect on our access to these facilities which, in turn, could have a material adverse effect on our results of operations, cash flow, liquidity or financial condition.

We have goodwill and intangible assets recorded on our balance sheet. We periodically evaluate the recoverability of the carrying value of our goodwill and intangible assets whenever events or changes in circumstances indicate such value may not be recoverable. An impairment assessment involves judgment as to assumptions regarding future sales and cash flow and the impact of market conditions on those assumptions. Future events and changing market conditions may impact our assumptions and change our estimates of future sales and cash flow, resulting in us incurring substantial impairment charges, which would adversely affect our results of operations or financial condition.

Increases in the Cost of Raw Materials and Energy May Adversely Affect Our Earnings or Cash Flow

We purchase raw materials and energy for use in the manufacturing, distribution and sale of our products. Factors such as political instability, higher tariffs and adverse weather conditions, including hurricanes, and other natural disasters can disrupt raw material and fuel supplies and increase our costs. Although raw materials and energy supplies (including oil and natural gas) are generally available from various sources in sufficient quantities, unexpected shortages and increases in the cost of raw materials and energy, or any deterioration in our relationships with or the financial viability of our suppliers, may have an adverse effect on our earnings or cash flow in the event we are unable to offset higher costs in a timely manner by sufficiently decreasing our operating costs or raising the prices of our products. In recent years, some raw material and energy prices have increased, particularly silicon and plastic packaging. The cost of raw materials and energy has in the past experienced, and likely will in the future continue to experience, periods of volatility.

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Risks Related to Doing Business in the PRC

Presently, we manufacture a majority of our products in our factories in the PRC. Additionally, many of our contract manufacturers are located in the PRC. Doing business in the PRC carries a number of risks including the following: Changes in the policies of the PRC government may have a significant impact upon the business we may be able to conduct in the PRC and the profitability of such business.

Our business operations may be adversely affected by the current and future political environment in the PRC. The government of the PRC has exercised and continues to exercise substantial control over virtually every sector of the Chinese economy, through regulation and state ownership. Our ability to operate in the PRC may be adversely affected by changes in Chinese laws and regulations, including those relating to taxation, labor and social insurance, import and export tariffs, raw materials, environmental regulations, land use rights, property and other matters. The PRC laws and regulations governing our current business operations are sometimes vague and uncertain. Any changes in such PRC laws and regulations may harm our business.

There are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including but not limited to the laws and regulations governing our business, or the enforcement and performance of our arrangements with customers in the event of the imposition of statutory liens, death, bankruptcy and criminal proceedings. We cannot predict what effect the interpretation of existing or new PRC laws or regulations may have on our business. If the relevant authorities find that we are in violation of PRC laws or regulations, they would have broad discretion in dealing with such a violation, including, without limitation:

levying fines;

revoking our business and other licenses;

requiring that we restructure our ownership or operations; and

requiring that we discontinue any portion or all of our business.

The fluctuation of the Chinese Yuan Renminbi may harm your investment.

Under Chinese monetary policy, the Chinese Yuan Renminbi is permitted to fluctuate within a managed band against a basket of certain foreign currencies and has resulted in increased volatility in the exchange rate the Chinese Yuan Renminbi against the U.S. Dollar. While the international reaction to the Chinese Yuan Renminbi revaluation has been positive, there remains international pressure on the PRC government to adopt an even more flexible currency policy, which may result in a further and more significant appreciation of the Chinese Yuan Renminbi against the U.S. Dollar, which could lead to higher manufacturing costs for our products.

The PRC's legal and judicial system may not adequately protect our business and operations and the rights of foreign investors.

The PRC legal and judicial system may negatively impact foreign investors, with enforcement of existing laws inconsistent. In addition, the promulgation of new laws, changes to existing laws and the pre-emption of local regulations by national laws may adversely affect foreign investors.

Availability of adequate workforce levels

Presently, the vast majority of workers at our PRC factories are obtained from third-party employment agencies. As the labor laws, social insurance and wage levels continue to grow and the workers become more sophisticated, our costs to employ these and other workers in the PRC may grow beyond that anticipated by management. While we have already experienced increases in labor rates in the PRC, as the PRC market continues to open up and grow, we may experience an increase in competition for the same workers, resulting in either an inability to attract and retain an adequate number of qualified workers or an increase in our employment costs to obtain and retain these workers.

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Risks and Uncertainties Associated with Our Expansion Into and Our Operations Outside of the United States May Adversely Affect Our Results of Operations, Cash Flow, Liquidity or Financial Condition Net external sales of our consolidated foreign subsidiaries totaled approximately 48.2%, 44.3% and 41.0% of our total consolidated net sales in 2018, 2017 and 2016, respectively. We expect that the international share of our total revenues will continue to make up a significant part of our current business and future strategic plans, Additionally, we operate factories in the PRC, Brazil and Mexico, as well as an engineering center in India. As a result, we are increasingly exposed to the challenges and risks of doing business outside the United States, which could reduce our revenues or profits, increase our costs, result in significant liabilities or sanctions, or otherwise disrupt our business. These challenges include: (1) compliance with complex and changing laws, regulations and policies of governments that may impact our operations, such as foreign ownership restrictions, import and export controls, tariffs, and trade restrictions; (2) compliance with U.S. and foreign laws that affect the activities of companies abroad, such as anti-corruption laws, competition laws, currency regulations, and laws affecting dealings with certain nations; (3) limitations on our ability to repatriate non-U.S. earnings in a tax effective manner; (4) the difficulties involved in managing an organization doing business in many different countries; (5) uncertainties as to the enforceability of contract and intellectual property rights under local laws; (6) rapid changes in government policy, political or civil unrest in the Middle East and elsewhere, acts of terrorism, or the threat of international boycotts or U.S. anti-boycott legislation; and (7) currency exchange rate fluctuations.

We are also exposed to risks relating to U.S. policy with respect to companies doing business in foreign jurisdictions, particularly in light of the current U.S. presidential administration. For example, the passage of the Tax Cuts and Jobs Act on December 22, 2017, significantly changed U.S. income tax law. While we are still assessing the long-term impact these changes will have on our overall income tax liability under our existing business structure, these recent changes in the U.S. tax laws could increase our U.S. income tax liability and adversely affect our consolidated after-tax profitability. In addition, the current U.S. presidential administration has introduced greater uncertainty with respect to future trade regulations and trade agreements. Changes in tax policy, trade regulations or trade agreements could have a material adverse effect on our business and results of operations.

Failure by Our International Operations to Comply With Anti-Corruption Laws or Trade Sanctions Could Increase Our Costs, Reduce Our Profits, Limit Our Growth, Harm Our Reputation, or Subject Us to Broader Liability We are subject to restrictions imposed by the U.S. Foreign Corrupt Practices Act and anti-corruption laws and regulations of other countries applicable to our operations. Anti-corruption laws and regulations generally prohibit companies and their intermediaries from making improper payments to government officials or other persons in order to receive or retain business. The compliance programs, internal controls and policies we maintain and enforce to promote compliance with applicable anti-bribery and anti-corruption laws may not prevent our associates, contractors or agents from acting in ways prohibited by these laws and regulations. We are also subject to trade sanctions administered by the Office of Foreign Assets Control and the U.S. Department of Commerce. Our compliance programs and internal control policies and procedures may not prevent conduct that is prohibited under these rules. The United States may impose additional sanctions at any time against any country in which or with whom we do business. Depending on the nature of the sanctions imposed, our operations in the relevant country could be restricted or otherwise adversely affected. Any violations of anti-corruption laws and regulations or trade sanctions could result in significant civil and criminal penalties, reduce our profits, disrupt our business or damage our reputation. In addition, an imposition of further restrictions in these areas could increase our cost of operations, reduce our profits or cause us to forgo development opportunities that would otherwise support growth.

Policy Changes Affecting International Trade Could Adversely Impact the Demand for Our Products and Our Competitive Position

Due to the international scope of our operations, changes in government policies on foreign trade and investment may affect the demand for our products and services, impact the competitive position of our products or prevent us from being able to sell products in certain countries. Our business benefits from free trade agreements, such as the North American Free Trade Agreement and successor agreements, which may include the United States-Mexico-Canada Agreement, and efforts to withdraw from, or substantially modify such agreements, in addition to the implementation

of more restrictive trade policies, such as more detailed inspections, higher tariffs, import or export licensing requirements, exchange controls or new barriers to entry, could have a material adverse effect on our results of operations, financial condition or cash flow and that of our customers, vendors and suppliers.

Additionally, the United Kingdom's anticipated exit from the European Union has caused and may continue to cause significant volatility in global stock markets, currency exchange rate fluctuations and global economic uncertainty. Although it is unknown what the terms of the United Kingdom's future relationship with the European Union will be, it is possible there will be greater restrictions on imports and exports between the United Kingdom and the European Union and increased regulatory complexities. Any of these factors could adversely impact customer demand, our relationships with customers and suppliers and our results of operations.

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Fluctuations in Foreign Currency Exchange Rates May Adversely Affect Our Results of Operations, Cash Flow, Liquidity or Financial Condition

Because of our international operations, we are exposed to risk associated with interest rates and value changes in foreign currencies, which may adversely affect our business. Historically, our reported net sales, earnings, cash flow and financial condition have been subjected to fluctuations in foreign exchange rates. Our exchange rate exposure is in the Argentinian Peso, Brazilian Real, British Pound, Chinese Yuan Renminbi, Euro, Hong Kong Dollar, Indian Rupee, Japanese Yen, Korean Won, Mexican Peso and Philippine Peso. While we actively manage the exposure of our foreign currency risk as part of our overall financial risk management policy, we believe we may experience losses from foreign currency exchange rate fluctuations, and such losses may adversely affect our sales, earnings, cash flow, liquidity or financial condition.

Risks Relating to Adverse Weather Conditions and Natural or Man-made Disasters, Contagious Disease, Terrorist Activity, and War May Adversely Affect Our Business, Financial Condition and Results of Operations Our ability, including manufacturing or distribution capabilities, and that of our suppliers, business partners and contract manufacturers, to make, move and sell products is critical to our success. From time to time, adverse weather conditions and natural disasters, as well as the potential spread of contagious diseases in locations where we or they own or operate significant operations could cause a disruption in our or our third-party manufacturer's production and distribution capabilities or a decline in demand for our products and services. In addition, actual or threatened war, terrorist activity, political unrest, or civil strife, such as recent events in Ukraine and Russia, the Middle East, North Korea and other geopolitical uncertainty could have a similar effect. Any one or more of these events may reduce our ability to produce or sell our products which may adversely affect our business, financial condition and results of operations, as well as require additional resources to restore our supply chain.

Dependence on Foreign Manufacturing

Although we own and operate factories in the PRC, Brazil and Mexico, third-party manufacturers located in Asia continue to manufacture a portion of our products. Our arrangements with these foreign manufacturers are subject to the risks of doing business abroad, such as tariffs, environmental and trade restrictions, intellectual property protection and enforcement, export license requirements, work stoppages, political and social instability, economic and labor conditions, foreign currency exchange rate fluctuations, changes in laws and policies (including fiscal policies), and other factors, which may have a material adverse effect on our business, results of operations and cash flows. We believe that the loss of any one or more of our manufacturers would not have a long-term material adverse effect on our business, results of operations and cash flows, because numerous other manufacturers are available to fulfill our requirements; however, the loss of any of our major third-party manufacturers may adversely affect our business, operating results, financial condition and cash flows until alternative manufacturing arrangements are secured. Dependence upon Key Suppliers

Most of the components used in our products are available from multiple sources. However, we purchase integrated circuits, used principally in our wireless control products, from a small number of key suppliers. To reduce our dependence on our integrated circuit suppliers we continually seek additional sources. We maintain inventories of our integrated circuits, which may be used in part to mitigate, but not eliminate, delays resulting from supply interruptions.

We have identified alternative sources of supply for our integrated circuit, component parts, and finished goods needs; however, there can be no assurance that we will be able to continue to obtain these inventory purchases on a timely basis. Any extended interruption, shortage or termination in the supply of any of the components used in our products, or a reduction in their quality or reliability, or a significant increase in prices of components, would have an adverse effect on our operating results, financial position and cash flows.

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Patents, Trademarks, and Copyrights

We have numerous patents, trade secrets, trademarks, trade names, and know-how that are valuable to our business. However, the procedures by which we identify, document, and file for patent, trademark, and copyright protection are based solely on engineering and management judgment, with no assurance that a specific filing will be issued, or if issued, will deliver any lasting value to us. Because of the rapid innovation of products and technologies that is characteristic of our industry, there can be no assurance that rights granted under any patent will provide competitive advantages to us or will be adequate to safeguard and maintain our proprietary rights. We further believe that our business is not materially dependent upon any single patent, trade secret, trademark, trade name, copyright, and know-how. Despite our efforts to protect such intellectual property and other proprietary information from unauthorized use or disclosure, third parties may attempt to disclose, obtain or use our intellectual property and information without our authorization. Although we rely on the patent, trademark, trade secret and copyright laws of the United States and other countries to protect our intellectual property rights, the laws of some countries may not protect such rights to the same extent as the laws of the United States, Unauthorized use of our intellectual property by third parties, the failure of foreign countries to have laws to protect our intellectual property rights, or an inability to effectively enforce such rights in foreign countries could have an adverse effect on our business. Further, some of our products include or use technology and/or components of third parties. While it may be necessary in the future to seek or renew licenses relating to various aspects of such products, we believe that, based upon past experience and industry practice, such licenses may be obtained on commercially reasonable terms; however, there can be no guarantee that such licenses may be obtained on such terms or at all. Because of technological changes in the wireless and home control industry, current extensive patent coverage, and the rapid rate of issuance of new patents, it is possible certain components of our products and business methods may unknowingly infringe upon the patents of others.

Potential for Litigation

As is typical in our industry and for the nature and kind of business in which we are engaged, from time to time various claims, charges and litigation are asserted or commenced by third parties against us or by us against third parties, arising from or related to product liability, infringement of patent or other intellectual property rights, breach of warranty, contractual relations or employee relations. The amounts claimed may be substantial, but they may not bear any reasonable relationship to the merits of the claims or the extent of any real risk of court awards assessed against us or in our favor.

Technology Changes in Wireless Control and Sensing

We currently derive substantial revenue from the sale of wireless remote controls, sensors and home automation products based on IR and RF and other technologies. Other control technologies exist or may be developed that may compete with this technology. In addition, we develop and maintain our own database of IR and RF codes. There are other IR and RF libraries offered by companies that we compete with in the marketplace. The advantage that we may have compared to our competitors is difficult to measure. In addition, if competing wireless control and sensing technology and products gain acceptance and start to be integrated into home electronics devices and home security and automation products that are currently utilizing our remote controllers and sensors, demand for our products may decrease, resulting in decreased operating results, financial condition, and cash flows.

Our Technology Development Activities May Experience Delays

We may experience technical, financial, resource or other difficulties or delays related to the further development of our technologies. Delays may have adverse financial effects and may allow competitors with comparable technology offerings to gain an advantage over us in the marketplace or in the standards setting arena. There can be no assurance that we will continue to have adequate staffing or that our development efforts will ultimately be successful. Moreover, certain of our technologies have not been fully tested in commercial use, and it is possible that they may not perform as expected. In such cases, our business, financial condition and operating results may be adversely affected, and our ability to secure new licensees and other business opportunities may be diminished.

Change in Competition and Pricing

Even with having our own factories, we will continue to rely on third-party manufacturers to build a portion of our universal wireless control products. Price is always an issue in winning and retaining business. If customers become

increasingly price sensitive, new competition may arise from manufacturers who decide to go into direct competition with us or from current competitors who perform their own manufacturing. If such a trend develops, we may experience downward pressure on our pricing or lose sales, which may have a material adverse effect on our operating results, financial condition and cash flows.

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Risks Related to Adverse Changes in General Business and Economic Conditions

Adverse changes in general business and economic conditions in the United States and worldwide may reduce the demand for some of our products and adversely affect our results of operations, cash flow, liquidity or financial condition. Higher inflation rates, interest rates, tax rates and unemployment rates, higher labor and health care costs, recessions, changing governmental policies, laws and regulations, increased tariffs, and other economic factors may adversely affect our results of operations, cash flow, liquidity or financial condition. Any such changes may impact our business in a number of ways, including:

Potential deferment of purchases and orders by customers and cyclical nature of portions of our business Uncertainty about current and future global economic conditions may cause consumers, businesses and governments to defer purchases in response to tighter credit, decreased cash availability and declining consumer confidence. Accordingly, future demand for our products may differ materially from our current expectations.

In addition, portions of our business involve the sale of products to sectors of the economy that are cyclical in nature, particularly the retail sector. Our sales to these sectors are affected by the levels of discretionary consumer and business spending. During economic downturns, the levels of consumer and business discretionary spending in these sectors may decrease, and the recovery of these sectors may lag behind the recovery of the overall economy. This decrease in spending will likely reduce the demand for some of our products and may adversely affect our sales, earnings, cash flow or financial condition. Although many of our end markets have shown signs of stabilization and modest improvement from the recent global economic downturn, the recovery has been erratic. A worsening in these sectors may cause a reduction in the demand for some of our products and may adversely impact sales, earnings, cash flow and financial condition.

Customers' inability to obtain financing to make purchases from us and/or maintain their business. Some of our customers require substantial financing in order to fund their operations and make purchases from us. The inability of these customers to obtain sufficient credit to finance purchases of our products may adversely impact our financial results. In addition, an economic downturn could result in insolvencies for our customers, which may adversely impact our financial results.

Potential impact on trade receivables

Credit market conditions may slow our collection efforts as customers experience increased difficulty in obtaining requisite financing, leading to higher than normal accounts receivable balances and longer days sales outstanding. Continuation of these conditions may limit our ability to collect our accounts receivable, which may result in greater expense associated with collection efforts and increased bad debt expense.

Negative impact from increased financial pressures on key suppliers

Our ability to meet customers' demands depends, in part, on our ability to obtain timely and adequate delivery of quality materials, parts and components from our suppliers. Certain of our components are available only from a single source or limited sources. If certain key suppliers were to become capacity constrained or insolvent as a result of an economic downturn, it may result in a reduction or interruption in supplies or a significant increase in the price of supplies and adversely impact our financial results. In addition, credit constraints at key suppliers may result in accelerated payment of accounts payable by us, impacting our cash flow.

Potential Fluctuations in Quarterly Results

We may from time to time increase our operating expenses to fund greater levels of research and development, sales and marketing activities, development of new distribution channels, improvements in our operational and financial systems and development of our customer support capabilities, and to support our efforts to comply with various government regulations. To the extent such expenses precede or are not subsequently followed by increased revenues, our business, operating results, financial condition and cash flows will be adversely affected.

In addition, we may experience significant fluctuations in future quarterly operating results that may be caused by many other factors, including demand for our products, introduction or enhancement of products by us and our competitors, the loss or acquisition of any significant customers, market acceptance of new products, price reductions by us or our competitors, mix of distribution channels through which our products are sold, product or supply constraints, level of product returns, mix of customers and products sold, component pricing, mix of international and domestic revenues, foreign currency exchange rate fluctuations and general economic conditions. In addition, as a

strategic response to changes in the competitive environment, we may from time to time make certain pricing or marketing decisions or acquisitions that may have a material adverse effect on our business, results of operations or financial condition. As a result, we believe period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as an indication of future performance.

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Due to all of the foregoing factors, it is possible that in some future quarters our operating results will be below the expectations of public market analysts and investors. If this happens the price of our common stock may be materially adversely affected.

Our Ability to Generate Cash Depends on Many Factors Beyond Our Control. We Also Depend on the Business of Our Subsidiaries to Satisfy Our Cash Needs

Our historical financial results have been, and we anticipate that our future financial results will be, subject to fluctuations. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We cannot assure you that our business will generate sufficient cash flow from our operations or that future borrowings will be available to us in an amount sufficient to enable us to make payments of our debt, fund our other liquidity needs and make planned capital expenditures.

The degree to which we are currently leveraged could have important consequences for shareholders. For example, it could:

require us to dedicate a substantial portion of our cash flow from operations to the payment of debt service, reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes;

increase our vulnerability to adverse economic or industry conditions;

4 imit our ability to obtain additional financing in the future to enable us to react to changes in our business; or place us at a competitive disadvantage compared to businesses in our industry that have less debt.

A significant portion of our operations are conducted through our subsidiaries. As a result, our ability to generate sufficient cash flow for our needs is dependent on the earnings of our subsidiaries and the payment of those earnings to us in the form of dividends, loans or advances and through repayment of loans or advances from us. Our subsidiaries are separate and distinct legal entities. Our subsidiaries have no obligation to pay any amounts due on our debt or to provide us with funds to meet our cash flow needs, whether in the form of dividends, distributions, loans or other payments. In addition, any payment of dividends, loans or advances by our subsidiaries may be subject to statutory or contractual restrictions. Payments to us by our subsidiaries will also be contingent upon our subsidiaries' earnings and business considerations. Our right to receive any assets of any of our subsidiaries upon their liquidation or reorganization will be effectively subordinated to the claims of that subsidiary's creditors, including trade creditors. In addition, even if we are a creditor of any of our subsidiaries, our rights as a creditor would be subordinate to any security interest in the assets of our subsidiaries and any indebtedness of our subsidiaries senior to that held by us. Further, changes in the laws of foreign jurisdictions in which we operate may adversely affect the ability of some of our foreign subsidiaries to repatriate funds to us.

In addition, we may fund a portion of our seasonal working capital needs and obtain funding for other general corporate purposes through short-term borrowings backed by our revolving credit facility and other financing facilities. If any of the banks in these credit and financing facilities are unable to perform on their commitments, which may adversely affect our ability to fund seasonal working capital needs and obtain funding for other general corporate purposes, our cash flow, liquidity or financial condition may be adversely impacted. Although we currently have available credit facilities to fund our current operating needs, we cannot be certain that we will be able to replace our existing credit facilities or refinance our existing or future debt when necessary. Our cost of borrowing and ability to access the capital markets are affected not only by market conditions, but also by our debt and credit ratings assigned by the major credit rating agencies. Downgrades in these ratings will increase our cost of borrowing and may have an adverse effect on our access to the capital markets, including our access to the commercial paper market. An inability to access the capital markets may have a material adverse effect on our results of operations, cash flow, liquidity or financial condition. Additionally, any failure to comply with covenants in the instruments governing our debt could result in an event of default which, if not cured or waived, would have a material adverse effect on us.

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The Price of Our Common Stock is Volatile and May Decline Regardless of Our Operating Performance Historically, we have had large fluctuations in the price of our common stock, and such fluctuations may continue. The market price for our common stock is volatile and may fluctuate significantly in response to a number of factors, most of which we cannot control, including:

the public's response to press releases or other public announcements by us or third parties, including our filings with the SEC and announcements relating to product and technology development, relationships with new and existing customers, litigation and other legal proceedings in which we are involved and intellectual property impacting us or our business;

announcements concerning strategic transactions, such as spin-offs, joint ventures and acquisitions or divestitures; the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;

changes in financial estimates or ratings by any securities analysts who follow our common stock, our failure to meet these estimates or failure of those analysts to initiate or maintain coverage of our common stock;

investor perceptions as to the likelihood of achievement of near-term goals;

changes in market share of significant customers;

changes in operating performance and stock market valuations of other technology or content providing companies generally; and

market conditions or trends in our industry or the economy as a whole.

In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were involved in securities litigation, we may incur substantial costs and our resources and the attention of management may be diverted from our business.

In addition, our officers and directors periodically sell shares of our common stock which they own, many times pursuant to trading plans established under Rule 10b5-1 of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Sales of shares by our officers and directors may not be indicative of their respective opinions of our performance at the time of sale or of our potential future performance. Nonetheless, the market price of our stock may be affected by such sales of shares by our officers and directors.

If Securities or Industry Analysts Fail to Continue Publishing Research About Our Business, Our Stock Price and Trading Volume May Decline

The trading market for our common stock has historically been at low volumes and is influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we may lose visibility in the financial markets, which in turn may cause our stock price or trading volume to decline.

Future Sales of Our Equity May Depress the Market Price of Our Common Stock

We have several institutional stockholders that own significant blocks of our common stock. If one or more of these stockholders were to sell large portions of their holdings in a relatively short time, for liquidity or other reasons, the prevailing market price of our common stock may be negatively affected. Further, due to our historically low trading volumes, such large stockholders may not be able to sell the number of shares they wish to sell and/or in the time frame in which they wish to sell. Moreover, while such large stockholders are attempting to sell their shares, other stockholders may not be able to sell their shares at the price and time that such other stockholders desire due to the low trading volumes of our stock. Additionally, in March 2016, we issued common stock purchase warrants to Comcast Corporation ("Comcast") to purchase up to 725,000 shares of our common stock at a price of \$54.55 per share. The right to exercise the warrants is subject to vesting over three successive two-year periods (the first two-year period commenced on January 1, 2016 and ended on December 31, 2017) based on the level of purchases of goods and services from us by Comcast and its affiliates, as defined in the warrants. To the extent that the warrants vest and Comcast exercises the warrants and sells any of the shares of common stock issuable upon exercise, or the perception that such sales may occur, could adversely affect the market price and/or trading volume of our common stock. Based upon the volume of goods and services purchased by Comcast during the first two-year period which ended on December 31, 2017, Comcast vested in 175,000 of the warrants.

Approved Stock Repurchase Programs May Not Result in a Positive Return of Capital to Stockholders

Periodically, our Board approves programs to repurchase our common stock based upon an assessment of then current value as compared to then trading ranges and investor analyst reports. Also considered in this decision is the effect any such repurchases may have on our cash balances and needs, cash flow, and short- and long-term borrowing. Our stock price has experienced

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substantial price volatility in the past and may continue to do so in the future. Additionally, we, the technology industry and the stock market as a whole have experienced extreme stock price and volume fluctuations that have affected stock prices in ways that may have been unrelated to our and these companies' operating performance. Price volatility over a given period may cause the average price at which we repurchase our own stock to exceed the stock's price at a given point in time. While we believe our stock price should reflect expectations of future growth and profitability, we also believe our stock price should reflect expectations that our share repurchase program will be fully consummated even though our share repurchase program does not obligate us to acquire any specific number of shares. If we fail to meet expectations related to future growth, profitability, share repurchases or other market expectations, our stock price may decline significantly, which could have a material adverse impact on investor confidence.

Dependence on Consumer Preference

We are susceptible to fluctuations in our business based upon consumer demand for our products. In addition, we cannot guarantee that increases in demand for our products associated with increases in the deployment of new technology will continue. We believe that our success depends on our ability to anticipate, gauge and respond to fluctuations in consumer preferences. However, it is impossible to predict with complete accuracy the occurrence and effect of fluctuations in consumer demand over a product's life cycle. Moreover, any growth in revenues that we achieve may be transitory and should not be relied upon as an indication of future performance.

Demand for Consumer Service and Support

We have continually provided domestic and international consumer service and support to our customers to add overall value and to help differentiate us from our competitors. We continually review our service and support group and are marketing our expertise in this area to other potential customers. There can be no assurance that we will be able to attract new customers in the future.

In addition, certain of our products have more features and are more complex than others and therefore require more end-user technical support. In some instances, we rely on distributors or dealers to provide the initial level of technical support to the end-users. We provide the second level of technical support for bug fixes and other issues at no additional charge. Therefore, as the mix of our products includes more of these complex product lines, support costs may increase, which may have an adverse effect on our business, operating results, financial condition and cash flows. Dependence upon New Product Introduction

Our ability to remain competitive in the wireless control, AV accessory, home security and home automation markets will depend considerably upon our ability to successfully identify new product opportunities, as well as develop and introduce these products and enhancements on a timely and cost effective basis. There can be no assurance that we will be successful at developing and marketing new products or enhancing our existing products, or that these new or enhanced products will achieve consumer acceptance and, if achieved, will sustain that acceptance. In addition, there can be no assurance that products developed by others will not render our products non-competitive or obsolete or that we will be able to obtain or maintain the rights to use proprietary technologies developed by others which are incorporated in our products. Any failure to anticipate or respond adequately to technological developments and customer requirements, or any significant delays in product development or introduction, may have a material adverse effect on our operating results, financial condition and cash flows.

In addition, the introduction of new products may require significant expenditures for research and development, tooling, manufacturing processes, inventory and marketing. In order to achieve high volume production of any new product, we may have to make substantial investments in inventory and expand our production capabilities. Dependence on Major Customers

The economic strength and weakness of our worldwide customers affect our performance. We sell our wireless control products, AV accessory products, and proprietary technologies to subscription broadcasters, original equipment manufacturers, retailers and private label customers. We also supply our products to our wholly owned, non-U.S. subsidiaries and to independent foreign distributors, who in turn distribute our products worldwide. While we generally have a broad and varied customer base, during the years ended December 31, 2018, 2017 and 2016, Comcast and AT&T accounted for sales totaling more than 10% of our net sales. In addition to these two customers, we have some customers that, individually, purchase a large amount of products from us. Although our

broad distribution channels help to minimize the impact of the loss of any one customer, the loss of any of these large individual customers, or our inability to maintain order volume with these customers, may have an adverse effect on our sales, operating results, financial condition and cash flows.

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Outsourced Labor

We continue to use outside resources to assist us in the development of some of our products and technologies. While we believe that such outside services will continue to be available to us, if they cease to be available, the development of these products and technologies may be substantially delayed, which may have a material adverse effect on our operating results, financial condition and cash flows.

Disruptions Caused by Labor Disputes or Organized Labor Activities Could Materially Harm our Business and Reputation

Currently, approximately 1,300 of our Brazil and Mexico employees are represented by labor unions. Disputes with the current labor unions or new union organizing activities could lead to production slowdowns or stoppages and make it difficult or impossible for us to meet scheduled delivery times for product shipments to some of our customers, which could result in a loss of business and material damage to our reputation. In addition, union activity and compliance with international labor standards could result in higher labor costs, which could have a material adverse effect on our financial position and results of operations.

Competition

Competition within the wireless control industry is based primarily on product availability, price, speed of delivery, ability to tailor specific solutions to customer needs, quality, and depth of product lines. Our competition is fragmented across our products, and, accordingly, we do not compete with any one company across all product lines. We compete with a variety of entities, some of which have greater financial resources. Other competitors are smaller and may be able to offer more specialized products. Our ability to remain competitive in this industry depends in part on our ability to successfully identify new product opportunities, develop and introduce new products and enhancements on a timely and cost effective basis, as well as our ability to successfully identify and enter into strategic alliances with entities doing business within the industries we serve. Competition in any of these areas may reduce our sales and adversely affect our earnings or cash flow by resulting in decreased sales volumes, reduced prices and increased costs of manufacturing, distributing and selling our products. There can be no assurance that our product offerings will be, and/or will remain, competitive or that strategic alliances, if any, will achieve the type, extent, and amount of success or business that we expect them to achieve. The sales of our products and technology may not occur or grow in the manner we expect, and thus we may not recoup costs incurred in the research and development of these products as quickly as we expect, if at all.

The home security and automation industry is highly fragmented and subject to significant competition and pricing pressures. In particular, the monitored security industry providers have highly recognized brands which may drive increased awareness of their security/automation offerings rather than ours, have access to greater capital and resources than us, and may spend significantly more on advertising, marketing and promotional resources which could have a material adverse effect on our ability to drive awareness and demand for our products and services. In addition, cable and telecommunications companies have expanded into the monitored security industry and are bundling their existing offerings with monitored security services. We also face competition from Do-It-Yourself ("DIY") companies that are increasingly providing products which enable customers to self-monitor and control their environments without third-party involvement. Further, DIY providers may also offer professional monitoring with the purchase of their systems and equipment or new IoT devices and services with automated features and capabilities that may be appealing to customers. Continued pricing pressure, improvements in technology and shifts in customer preferences towards self-monitoring or DIY could adversely impact our customer base and/or pricing structure and have a material adverse effect on our business, financial condition, results of operations and cash flows.

We are Exposed to Greater Risks of Liability for Omissions or System Failures

If a customer or third party believes that he or she has suffered harm to person or property due to an actual or alleged security system failure, he or she (or their insurers) may pursue legal action against us, and the cost of defending the legal action and of any judgment against us could be substantial. In particular, because some of our products and services are intended to help protect lives and real and personal property, we may have greater exposure to litigation risks than businesses that provide other consumer and small business products and services. While our customer contracts contain a series of risk-mitigation provisions that are aimed at limiting our liability and/or limiting a

claimant's ability to pursue legal action against us, in the event of litigation with respect to such matters it is possible that these risk-mitigation provisions may be deemed not applicable or unenforceable and, regardless of the ultimate outcome, we may incur significant costs of defense that could materially and adversely affect our business, financial condition, results of operations and cash flows.

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Environmental Matters

Many of our products are subject to various federal, state, local and international laws governing chemical substances in products, including laws regulating the manufacture and distribution of chemical substances and restricting the presence of certain substances in electronics products. In addition, many of these laws and regulations make producers of electrical goods responsible for collection, recycling, treatment and disposal of recovered products. As a result, we may face significant costs and liabilities in complying with these laws and any future laws and regulations or enforcement policies that may have a material adverse effect upon our operating results, financial condition, and cash flows.

Leased Property

We lease all of the properties used in our business. We can give no assurance that we will enter into new or renewal leases, or that, if entered into, the new lease terms will be similar to the existing terms or that the terms of any such new or renewal leases will not have a significant and material adverse effect on our operating results, financial condition and cash flows.

Transportation Costs and Impact of Oil Prices

We ship products from our factories and foreign manufacturers via ocean and air transport. It is sometimes difficult to forecast swings in demand or delays in production and, as a result, products may be shipped via air which is more costly than ocean shipments. We typically cannot recover the increased cost of air freight from our customers. Additionally, tariffs and other export fees may be incurred to ship products from foreign manufacturers to the customer. The inability to predict swings in demand or delays in production may increase the cost of freight which may have a material adverse effect on our product margins.

In addition, we have an exposure to oil prices in two forms. The first is in the prices of oil-based materials in our products, which are primarily the plastics and other components that we include in our finished products. The second is in the cost of delivery and freight, which would be passed on by the carriers that we use in the form of higher rates. We record freight-in as a cost of sales and freight-out in operating expenses. Rising oil prices may have an adverse effect on cost of sales and operating expenses.

Significant Developments From the Recent and Potential Changes in U.S. Trade Policies Could Have a Material Adverse Effect On Us

The U.S. government has indicated its intent to alter its approach to international trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements and treaties with foreign countries. On various dates in July, August and September, the U.S. government implemented additional tariffs of 25% and 10% (increasing to 25% on January 1, 2019), on certain goods imported from China. We manufacture a substantial amount of our products in China and are presently subjected to these additional tariffs and will remain so until the tariff lists remains unaltered. These tariffs, and other governmental action relating to international trade agreements or policies, may adversely impact demand for our products, our costs, customers, suppliers and/or the U.S. economy or certain sectors thereof and, as a result, adversely impact our business, These additional tariffs may cause us to increase prices to our customers which may reduce demand, or, if we are unable to increase prices, result in lowering our margin on products sold. It remains unclear what the U.S. or foreign governments will or will not do with respect to tariffs, international trade agreements and policies on a short-term or long-term basis. We cannot predict future trade policy or the terms of any renegotiated trade agreements and their impacts on our business. The adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact demand for our products, our costs, our customers, our suppliers, and the U.S. economy, which in turn could adversely impact our business, financial condition and results of operations.

As a result of these tariffs and other governmental action, we are presently shifting our production capabilities outside of China, which may result in potentially significant, material costs and disruption to our operations as we pursue the processes of recreating a new supply chain, identifying substitute components and establishing new manufacturing locations. Any shift in production outside of China may not be successful due to timing of implementing these changes, and we may not be successful in reducing our costs, or off-setting the impact of tariffs. Proprietary Technologies

We produce highly complex products that incorporate leading-edge technology, including hardware, firmware, and software. Firmware and software may contain bugs that may unexpectedly interfere with product operation. There can be no assurance that our testing programs will detect all defects in individual products or defects that may affect numerous shipments. The presence of defects may harm customer satisfaction, reduce sales opportunities, or increase warranty claims and/or returns. An inability to cure or repair such a defect may result in the failure of a product line, temporary or permanent withdrawal of a product or market, damage to our reputation, increased inventory costs, or product re-engineering expenses, any of which may have a material impact on our operating results, financial condition and cash flows.

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Strategic Business Transactions

We have historically made strategic acquisitions of businesses in industries adjacent to our core business and will likely acquire additional businesses in the future as part of our long-term growth strategy. The success of future acquisitions depends in large part on our ability to integrate the operations and personnel of the acquired companies and manage challenges that may arise as a result of the acquisitions, particularly when the acquired businesses operate in new or foreign markets. In the event we do not successfully integrate such future acquisitions into our existing operations so as to realize the expected return on our investment, our results of operations, cash flow or financial condition could be adversely affected.

Growth Projections

Management has made projections required for the preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") regarding future events and the financial performance of the Company, including those involving:

the benefits the Company expects as a result of the development and success of products and technologies, including new products and technologies;

the benefits expected by conducting business in Asian and Latin American markets, without which, we may not be able to recover the costs we incur to enter into such markets;

new contracts with new and existing customers and new market penetrations;

the expected continued adoption of the Company's technologies in gaming consoles, mobile devices, and other home entertainment and control devices;

the expected continued growth in digital TVs, DVRs, PVRs and overall growth in the Company's industry;

the impact competitors and OTT providers may have on our business; and

the effects we may experience due to current global and regional economic conditions.

Actual events or results may be unfavorable to management's projections, which may have a material adverse effect on our projected operating results, financial condition and cash flows.

Additionally, we have goodwill and intangible assets recorded on our consolidated balance sheet. We periodically evaluate the recoverability of the carrying value of our goodwill and intangible assets whenever events or changes in circumstances indicate that such value may not be recoverable. Impairment assessment involves judgment as to assumptions regarding future sales and cash flows and the impact of market conditions on those assumptions. Future events and changing market conditions may impact our assumptions and may result in changes in our estimates of future sales and cash flows that may result in us incurring substantial impairment charges, which would adversely affect our results of operations or financial condition.

Market Projections and Data are Forward-looking in Nature.

Our strategy is based on our own projections and on analyst, industry observer and expert projections, which are forward-looking in nature and are inherently subject to risks and uncertainties. The validity of their and our assumptions, the timing and scope of the markets within which we compete, economic conditions, customer buying patterns, the timeliness of equipment development, pricing of products, and availability of capital for infrastructure improvements may affect these predictions. In addition, market data upon which we rely is based on third party reports that may be inaccurate. The inaccuracy of any of these projections and/or market data may adversely affect our operating results and financial condition.

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Cybersecurity Issues: Security Breaches, Failure to Maintain the Integrity of and Protect Internal or Customer Data May Result in Faulty Business Decisions, Operational Inefficiencies, Damage to our Reputation and/or Subject Us to Costs, Fines, or Lawsuits

Our business requires collection, processing, and retention of large volumes of internal and sensitive and confidential customer data, including personally identifiable information of our customers in various information systems that we maintain and in those maintained by third parties with whom we contract to provide services, including in areas such as customer product servicing, human resources outsourcing, website hosting, and various forms of electronic communications. We and third parties who provide services to us also maintain personally identifiable information about our employees. The integrity and protection of that customer, employee, and company data, including proprietary information, is critical to us. If that data is inaccurate or incomplete, we may make faulty decisions. Our customers and employees also have a high expectation that we and our service providers will adequately protect their personal information. Despite the security measures we have in place, our facilities and systems, and those of the retailers, dealers, licensees and other third-party suppliers and vendors with which we do business, may be vulnerable to security breaches, cyber attacks, acts of vandalism or misconduct, computer viruses, misplaced or lost data, programming and/or human errors or other similar events. Any security breach involving the misappropriation, loss or other unauthorized disclosure of confidential customer, employee, supplier or Company information, whether caused by us, an unknown third party, or the retailers, dealers, licensees or other third-party suppliers and vendors with which we do business, could result in losses, severely damage our reputation, expose us to the risks of litigation and liability, disrupt our operations and have a material adverse effect on our business, results of operations and financial condition. As cyber security threats evolve in sophistication and become more prevalent in numerous industries worldwide, we continue to increase our sensitivity and attention to these threats, seek additional investments and resources to address these threats and enhance the security of our facilities and systems and strengthen our controls and procedures implemented to monitor and mitigate these threats. The domestic and international regulatory environment related to information security, data collection and privacy is increasingly rigorous and complex, with new and constantly changing requirements applicable to our business. Compliance with these requirements, including the European Union's General Data Protection Regulation and other domestic and international regulations, could result in additional costs and changes to our business practices.

Moreover, we rely heavily on computer systems to manage and operate our business, record and process transactions, and manage, support and communicate with our employees, customers, suppliers and other vendors. Computer systems are important to production planning, finance, company operations and customer service, among other business-critical processes. Despite efforts to prevent disruptions to our computer systems, our systems may be affected by damage or interruption from, among other causes, power outages, system failures, computer viruses and other intrusions, including cyber attacks. Computer hardware and storage equipment that is integral to efficient operations, such as email, telephone and other functionality, is concentrated in certain physical locations in the various continents in which we operate. Additionally, we rely on software applications, enterprise cloud storage systems and cloud computing services provided by third-party vendors, and our business may be adversely affected by service disruptions in or security breaches to such third-party systems.

Effectiveness of Our Internal Control Over Financial Reporting

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to include our assessment of the effectiveness of our internal control over financial reporting in our Annual Report on Form 10-K. Furthermore, our independent registered public accounting firm is required to audit our internal control over financial reporting and separately report on whether it believes we maintain, in all material respects, effective internal control over financial reporting. Although we believe that we currently have adequate internal control procedures in place, we cannot be certain that future material changes to our internal control over financial reporting will be effective. If we cannot adequately maintain the effectiveness of our internal control over financial reporting, we may be subject to sanctions or investigation by regulatory authorities, such as the SEC.

Our Governing Corporate Documents Contain, and Our Board of Directors May Implement, Antitakeover Provisions that May Deter Takeover Attempts

Our governing corporate documents, among other things, require super-majority votes in connection with certain mergers and similar transactions. In addition, our Board of Directors may, without stockholder approval, implement other anti-takeover defenses, such as a stockholder's rights plan.

Regulations Related to the Use of Conflict-Free Minerals May Increase Our Costs and Expenses, and an Inability to Certify that Our Products are Conflict-Free May Adversely Affect Customer Relationships

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve the transparency and accountability of the use by public companies in their products of minerals mined in certain countries and to prevent the sourcing of such "conflict" minerals. As a result, the SEC enacted new annual disclosure and reporting requirements for public companies that use these minerals in their products, which apply to us. Under the final rules, we are required to conduct due diligence to

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determine the source of any conflict minerals used in our products and to make annual disclosures in filings with the SEC. Because our supply chain is broad-based and complex, we may not be able to easily verify the origins for all minerals used in our products. In addition, the new rules may reduce the number of suppliers who provide components and products containing conflict-free minerals and thus may increase the cost of the components used in manufacturing our products and the costs of our products to us. Any increased costs and expenses may have a material adverse impact on our financial condition and results of operations. Further, if we are unable to certify that our products are conflict free, we may face challenges with our customers, which may place us at a competitive disadvantage, and our reputation may be harmed.

We are Subject to a Wide Variety of Complex Domestic and Foreign Laws and Regulations. We are subject to a wide variety of complex domestic and foreign laws and regulations, and legal compliance risks, including securities laws, tax laws, employment and pension-related laws, competition laws, U.S. and foreign export and trading laws, and laws governing improper business practices. We are affected by new laws and regulations, and changes to existing laws and regulations, including interpretations by courts and regulators. From time to time, our Company, our operations and the industries in which we operate are being reviewed or investigated by regulators, which may lead to enforcement actions or the assertion of private litigation claims and damages.

Although we believe that we have adopted appropriate risk management and compliance programs to mitigate these risks, the global and diverse nature of our operations means that compliance risks will continue to exist. Investigations, examinations and other proceedings, the nature and outcome of which cannot be predicted, will likely arise from time to time. These investigations, examinations and other proceedings may subject us to significant liability and require us to make significant accruals or pay significant settlements, fines and penalties, which may have a material adverse effect on our results of operations, cash flow or financial condition.

We are subject to tax laws and regulations in the United States and multiple foreign jurisdictions. We are affected by changes in tax laws and regulations, as well as changes in related interpretations and other tax guidance. In the ordinary course of our business, we are subject to examinations and investigations by various tax authorities and other regulators. In addition to existing examinations and investigations, there could be additional examinations and investigations in the future, and existing examinations and investigations could be expanded.

On December 22, 2017, U.S. tax reform legislation known as the Tax Cuts and Jobs Act (the "Tax Act") was signed into law. The Tax Act made substantial changes to then-current U.S. tax law, including a reduction in the corporate tax rate, a limitation on deductibility of interest expense, a limitation on the use of net operating losses to offset future taxable income, the allowance of immediate expensing of capital expenditures, deemed repatriation of foreign earnings and significant changes to the taxation of foreign earnings going forward. The Tax Act contains numerous, complex provisions impacting U.S. multinational companies, and we continue to review and assess the legislative language and guidance promulgated by regulators to determine the Tax Act's full impact on us. The full extent of the impact remains uncertain at this time, and our current interpretations of, and assumptions regarding, the Tax Act are subject to additional regulatory or administrative developments, including any regulations or additional guidance promulgated by the U.S. Internal Revenue Service or other regulators. Further, we can provide no assurance our current interpretations of, and assumptions regarding, the Tax Act and any related regulations or guidance will not be reviewed or investigated by regulators in the future. As a result, the Tax Act, including any regulations or other guidance promulgated by the U.S. Internal Revenue Service or other regulators, and other tax laws could have significant effects on us, some of which could materially and adversely impact our financial condition, results of operations and cash flow.

For non-income tax risks, we estimate material loss contingencies and accrue for such loss contingencies as required by U.S. generally accepted accounting principles based on our assessment of contingencies where liability is deemed probable and reasonably estimable in light of the facts and circumstances known to us at a particular point in time. Subsequent developments may affect our assessment and estimates of the loss contingency. In the event the loss contingency is ultimately determined to be significantly higher than currently accrued, the recording of the additional liability may result in a material adverse effect on our results of operations or financial condition for the annual or

interim period during which such additional liability is accrued. In those cases where no accrual is recorded because it is not probable a liability has been incurred and cannot be reasonably estimated, any potential liability ultimately determined to be attributable to us may result in a material adverse effect on our results of operations, cash flow or financial condition for the annual or interim period during which such liability is accrued or paid. For income tax risks, we recognize tax benefits based on our assessment that a tax benefit has a greater than 50% likelihood of being sustained upon ultimate settlement with the applicable taxing authority that has full knowledge of all relevant facts. For those income tax positions where we determine there is not a greater than 50% likelihood such tax benefits will be sustained, we do not recognize a tax benefit in our financial statements. Subsequent events may cause us to change our assessment of the likelihood of sustaining a previously-recognized benefit which could result in a material adverse effect on our results of operations, cash flow or financial position for the annual or interim period during which such liability is accrued or paid.

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We are Required to Comply with Numerous Complex and Increasingly Stringent Domestic and Foreign Health, Safety and Environmental Laws and Regulations, the Cost of Which is Likely to Increase

Our operations are subject to various domestic and foreign health, safety and environmental laws and regulations. These laws and regulations not only govern our current operations and products, but also impose potential liability on us for our past operations. We expect health, safety and environmental laws and regulations to impose increasingly stringent requirements upon our industry and us in the future. Our costs to comply with these laws and regulations may increase as these requirements become more stringent in the future, and these increased costs may adversely affect our results of operations, cash flow or financial condition.

Changes in Financial Accounting Standards or Policies May Affect Our Reported Financial Condition or Results of Operations

From time to time the Financial Accounting Standards Board (the "FASB") and the SEC change their guidance governing the form and content of our external financial statements. In addition, accounting standard setters and those who interpret GAAP, such as the FASB and the SEC may change or even reverse their previous interpretations or positions with regard to how these standards should be applied. A change in accounting principles or their interpretation can have a significant effect on our reported results. In certain cases, the company may be required to apply new or revised guidance retroactively or apply existing guidance differently. For example, in May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers," which impacted the timing of revenue recognition for certain new and existing contracts with customers beginning January 1, 2018. Additionally, in February 2016, the FASB issued ASU 2016-02, "Leases," which changes the accounting for leases. These and other potential changes in reporting standards may substantially change our reporting practices in a number of areas, including revenue recognition and recording of assets and liabilities, and affect our reported financial condition or results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS None.

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ITEM 2. PROPERTIES

Our global headquarters is located in Scottsdale, Arizona. We utilize the following facilities:

Purpose or Use	Square Feet	Status
Corporate headquarters, engineering, research and development	25,106	Leased, expires February 27, 2027
Engineering, research and development	36,184	Leased, expires October 31, 2022
Call center	12,728	Leased, expires June 30, 2025
Engineering, research and development	27,141	Leased, expires November 30, 2019
Engineering, research and development	5,826	Leased, expires January 31, 2023
Engineering, research and development	7,891	Leased, expires November 30, 2021
European headquarters and call center	19,137	Leased, expires February 28, 2024
Engineering, research and development	21,326	Leased, expires January 31, 2019
Asian headquarters	12,000	Leased, expires June 30, 2019
Engineering, research and development	5,705	Leased, expires December 31, 2020
Manufacturing facility	1,204,697	Land leased, expires July 31, 2055
Manufacturing facility	77,888	Leased, expires October 31, 2025
Manufacturing facility	90,201	Leased, expires September 30, 2022
Service Center	26,850	Leased, expires April 14, 2020
Manufacturing facility	321,313	Leased, expires May 31, 2023
Manufacturing facility	345,662	Leased, expires February 28, 2022
Manufacturing facility	56,120	Leased, expires August 19, 2022
Manufacturing facility	101,571	Leased, expires September 20, 2023
Manufacturing facility	145,185	Leased, expires December 20, 2023
	Corporate headquarters, engineering, research and development Engineering, research and development Call center Engineering, research and development Engineering, research and development Engineering, research and development European headquarters and call center Engineering, research and development Asian headquarters Engineering, research and development Manufacturing facility Manufacturing facility Manufacturing facility Service Center Manufacturing facility	Corporate headquarters, engineering, research and development Engineering, research and development Call center Engineering, research and development European headquarters and call center Engineering, research and development Engineering, research and development Engineering, research and development Asian headquarters 12,000 Engineering, research and development 5,705 Manufacturing facility 77,888 Manufacturing facility 90,201 Service Center Manufacturing facility 321,313 Manufacturing facility 56,120 Manufacturing facility 101,571

Private ownership of land in mainland PRC is not allowed. All land in the PRC is owned by the government and (1) cannot be sold to any individual or entity. These facilities were developed on land which we lease from the PRC government.

In addition to the facilities listed above, we lease space in various international locations, primarily for use as sales offices.

Upon expiration of our facilities leases, we believe we will obtain lease agreements under similar terms; however, there can be no assurance that we will receive similar terms or that any offer to renew will be accepted.

See "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 12" for additional information regarding our obligations under leases.

ITEM 3. LEGAL PROCEEDINGS

We are subject to lawsuits arising out of the conduct of our business. The discussion of our litigation matters in "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 13" is incorporated by reference.

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

Our common stock trades on the NASDAQ Global Select Market under the symbol UEIC. Our stockholders of record on March 11, 2019 numbered 135. We have never paid cash dividends on our common stock, nor do we currently intend to pay any cash dividends on our common stock in the foreseeable future. We intend to retain our earnings, if any, for the future operation and expansion of our business.

Purchases of Equity Securities

The following table sets forth, for the fourth quarter, our total stock repurchases, average price paid per share and the maximum number of shares that may yet be purchased on the open market under our plans or programs:

	*				_
			Total	Total Dollar	
			Number of	Value of	Maximum
		Wajahtad	Shares	Shares	Dollar Value of
	Total Number	Weighted	Purchased	Purchased	Shares that May
Period	of Shares	Average Price Paid	as Part of	as Part of	Yet Be
	Purchased (1)	per Share	Publicly	Publicly	Purchased
			Announced	Announced	Under the Plans
			Plans or	Plans or	or Programs (3)
			Programs	Programs (2)	
October 1, 2018 - October 31, 2018	12,736	\$ 35.59	11,500	\$ 404,221	\$ 5,000,000
November 1, 2018 - November 30, 2018	10,331	34.04	9,300	317,991	4,682,009
December 1, 2018 - December 31, 2018	17,007	26.79	9,500	268,321	4,413,688
Total	40,074	\$ 31.45	30,300	\$ 990,533	

Of the repurchases in October, November and December, 1,236, 1,031 and 7,507 shares, respectively, represent

- (1) common shares of the Company that were owned and tendered by employees to satisfy tax withholding obligations in connection with the vesting of restricted shares.
- (2) Amounts in this column reflect the weighted average price paid for shares purchased under our share repurchase authorizations, inclusive of commissions paid to brokers.
 - On October 30, 2018, our board of directors approved a repurchase plan authorizing the repurchase of up to \$5.0
- (3) million of our common stock. Under these authorizations, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Exchange Act. On December 31, 2018, we had \$4.4 million of authorized repurchases remaining under the Board's authorizations. Equity Compensation Plans

Information regarding our equity compensation plans, including both stockholder approved plans and plans not approved by stockholders, is incorporated by reference to "ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS" under the caption "Equity Compensation Plan Information" and "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 16".

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Performance Chart

The following graph and table compares the cumulative total stockholder return with respect to our common stock versus the cumulative total return of the Standard & Poor's Small Cap 600 (the "S&P Small Cap 600"), the NASDAQ Composite Index, and the Peer Group Index for the five-year period ended December 31, 2018. The comparison assumes that \$100 was invested on December 31, 2013 in each of our common stock, S&P Small Cap 600, the NASDAQ Composite Index, and the Peer Group Index and that all dividends were reinvested. We have not paid any dividends and, therefore, our cumulative total return calculation is based solely upon stock price appreciation and not upon reinvestment of dividends. The graph and table depicts year-end values based on actual market value increases and decreases relative to the initial investment of \$100, based on information provided for each calendar year by the NASDAQ Stock Market and the New York Stock Exchange.

The comparisons in the graph and table below are based on historical data and are not intended to forecast the possible future performance of our common stock.

	12	/31/2013	12	/31/2014	12	/31/2015	12	/31/2016	12	/31/2017	12	/31/2018
Universal Electronics Inc.	\$	100	\$	171	\$	135	\$	169	\$	124	\$	66
S&P Small Cap 600	\$	100	\$	104	\$	101	\$	126	\$	141	\$	127
NASDAQ Composite Index	\$	100	\$	113	\$	120	\$	129	\$	165	\$	159
Peer Group Index (1)	\$	100	\$	110	\$	89	\$	123	\$	152	\$	143

⁽¹⁾ Companies in the Peer Group Index are as follows: TiVo Corporation (formerly Rovi Corporation), Logitech International, Dolby Laboratories, Inc., and VOXX International Corp.

The information presented above is as of December 31, 2013 through December 31, 2018. This information should not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to the liabilities of Section 18 of the Exchange Act nor should this information be incorporated by reference into any prior or future filings under the Exchange Act, except to the extent that we specifically incorporate it by reference into a filing.

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ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The information below is not necessarily indicative of the results of future operations and should be read in conjunction with "ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS", and the Consolidated Financial Statements and notes thereto included in "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA", of this Form 10-K, which are incorporated herein by reference, in order to further understand the factors that may affect the comparability of the financial data presented below.

	Year End	led]	December	31,						
(In thousands, except per share data)	2018		2017		2016		2015		2014	
Net sales	\$680,241		\$695,790)	\$651,37	1	\$602,833	,	\$562,329)
Operating income (loss)	\$(1,665)	\$10,670		\$25,397		\$35,919		\$41,280	
Net income (loss) attributable to Universal	\$11,924		\$(10,323	.)	\$20,354		\$29,174		\$32,534	
Electronics Inc.	Ψ11,72-		Φ(10,323	,	Ψ20,334		Ψ27,174		Ψ32,337	
Earnings (loss) per share attributable to Universal										
Electronics Inc.:										
Basic	\$0.85		\$(0.72)	\$1.41		\$1.91		\$2.06	
Diluted	\$0.85		\$(0.72)	\$1.38		\$1.88		\$2.01	
Shares used in computing earnings (loss) per share:										
Basic	13,948		14,351		14,465		15,248		15,781	
Diluted	14,060		14,351		14,764		15,542		16,152	
Cash dividends declared per common share	_		_		_		_		_	
Gross margin	20.8	%	23.8	%	25.2	%	27.7	%	29.7	%
Operating expenses as a % of net sales	21.1	%	22.3	%	21.3	%	21.8	%	22.4	%
Operating margin (deficit)	(0.2)%	1.5	%	3.9	%	5.9	%	7.3	%
Net income (loss) as a % of net sales	1.8	%	(1.5)%	3.1	%	4.8	%	5.8	%
Return on average assets	2.0	%	(1.8)%	4.0	%	6.1	%	7.3	%
	Decembe	r 31	 -							
(In thousands, except per share data)	2018		2017		2016		2015		2014	
Working capital	\$100,597	,	\$74,362		\$108,29	1	\$100,200)	\$183,600)
Ratio of current assets to current liabilities	1.4		1.2		1.5		1.5		2.3	
Total assets	\$555,596)	\$608,430)	\$521,036	6	\$495,220)	\$463,070)
Cash and cash equivalents	\$53,207		\$62,438		\$50,611		\$52,966		\$112,521	
Line of credit	\$101,500)	\$138,000)	\$49,987		\$50,000		\$—	
Stockholders' equity	\$262,960)	\$253,549)	\$280,510)	\$257,908		\$315,621	1
Book value per share (1)	\$19.03		\$18.04		\$19.28		\$17.97		\$19.85	
Ratio of liabilities to liabilities and stockholders' equity	52.7	%	58.3	%	46.2	%	47.9	%	31.8	%

⁽¹⁾ Book value per share is defined as stockholders' equity divided by common shares issued less treasury stock. The comparability of information for 2018, 2017, 2016 and 2015 compared to previous years is affected by the acquisitions of the net assets of Ecolink during the third quarter of 2015 and RCS during the second quarter of 2017. See "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 22" for further information.

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ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the Consolidated Financial Statements and the related notes that appear elsewhere in this document.

Overview

We develop control and sensor technology solutions and manufacture a broad line of pre-programmed and universal remote control products, AV accessories and intelligent wireless security and smart home products dedicated to redefining the home entertainment, automation and security experience. Our customers operate primarily in the consumer electronics market and include subscription broadcasters, OEMs, international retailers, private label brands, pro-security installers and companies in the computing industry. We also sell integrated circuits, on which our software and device control database is embedded, and license our device control database to OEMs that manufacture televisions, digital audio and video players, streamer boxes, cable converters, satellite receivers, set-top boxes, room air conditioning equipment, game consoles, and wireless mobile phones and tablets.

Since our beginning in 1986, we have compiled an extensive device control database that covers over one million individual device functions and approximately 8,600 unique consumer electronic brands. QuickSet®, our proprietary software, can automatically detect, identify and enable the appropriate control commands for home entertainment, automation and appliances like air conditioners. Our library is regularly updated with new control functions captured directly from devices, remote controls and manufacturer specifications to ensure the accuracy and integrity of our database and control engine. Our universal remote control library contains device codes that are capable of controlling virtually all set-top boxes, televisions, audio components, DVD players, Blu-Ray players, and CD players, as well as most other remote controlled home entertainment devices and home automation control modules worldwide.

With the wider adoption of more advanced control technologies, emerging RF technologies, such as RF4CE, Bluetooth, and Bluetooth Smart, have increasingly become a focus in our development efforts. Several new recently released platforms utilize RF to effectively implement popular features like voice search.

We operate as one business segment. We have 24 international subsidiaries located in Argentina, Brazil, British Virgin Islands, Cayman Islands, France, Germany, Hong Kong (3), India, Italy, Japan, Korea, Mexico, the Netherlands, People's Republic of China (6), Singapore, Spain and the United Kingdom.

To recap our results for 2018:

Net sales decreased 2.2% to \$680.2 million in 2018 from \$695.8 million in 2017.

Our gross margin percentage decreased from 23.8% in 2017 to 20.8% in 2018.

Operating expenses, as a percent of sales, decreased from 22.3% in 2017 to 21.1% in 2018

Operating income decreased 115.6% to an operating loss of \$1.7 million in 2018 from operating income of \$10.7 million in 2017, and our operating margin percentage decreased to an operating deficit of 0.2% in 2018, compared to an operating margin of 1.5% in 2017.

Our effective tax rate decreased to 54.4% in 2018 from 241.6% in 2017.

Our strategic business objectives for 2019 include the following:

continue to develop and market the advanced remote control products and technologies our customer base is adopting; continue to broaden our home control and home automation product offerings;

further penetrate international subscription broadcasting markets;

acquire new customers in historically strong regions;

increase our share with existing customers; and

continue to seek acquisitions or strategic partners that complement and strengthen our existing business.

We intend for the following discussion of our financial condition and results of operations to provide information that will assist in understanding our consolidated financial statements, the changes in certain key items in those financial statements from period to period, and the primary factors that accounted for those changes, as well as how certain accounting principles, policies and estimates affect our consolidated financial statements.

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Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, allowances for doubtful accounts, inventory valuation, our review for impairment of long-lived assets, intangible assets and goodwill, business combinations, income taxes, stock-based compensation expense and performance-based common stock warrants. Actual results may differ from these judgments and estimates, and they may be adjusted as more information becomes available. Any adjustment may be significant and may have a material impact on our consolidated financial position or results of operations.

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably may have been used, or if changes in the estimate that are reasonably likely to occur may materially impact the financial statements. Management believes the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements. In addition to the accounting policies mentioned below, see "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA — Notes to Consolidated Financial Statements — Note 2" for other significant accounting policies.

Revenue recognition

Our performance obligations primarily arise from manufacturing and delivering universal control, sensing and automation products and AV accessories, which are sold through multiple channels, and intellectual property that is embedded in these products or licensed to others. These performance obligations are satisfied at a point in time or over time, as described below. Payment terms are typically on open credit terms consistent with industry practice and do not have significant financing components. Some contracts contain early payment discounts, which are recognized as a reduction to revenue if the customer typically meets the early payment conditions. Consideration may be variable based on indeterminate volumes.

Effective January 1, 2018, revenue is recognized over time when the customer simultaneously receives and consumes the benefits provided by our performance, our performance creates or enhances an asset that the customer controls, or when our performance creates an asset with no alternative use to us (custom products) and we have an enforceable right to payment for performance completed to date, such as a firm order or other contractual commitment from the customer. An asset does not have an alternative use if we are unable to redirect the asset to another customer in the foreseeable future without significant rework. The method for measuring progress towards satisfying a performance obligation for a custom product is based on the costs incurred to date (cost-to-cost method). We believe that the costs associated with production are most closely aligned with the revenue associated with those products.

We recognize revenue at a point in time if the criteria for recognizing revenue over time are not met, the title of the goods has transferred, and we have a present right to payment.

We typically recognize revenue for the sale of tooling at a point in time, which is generally upon completion of the tooling and, if applicable, acceptance by the customer.

A provision is recorded for estimated sales returns and allowances and is deducted from gross sales to arrive at net sales in the period the related revenue is recorded. These estimates are based on historical sales returns and allowances, analysis of credit memo data and other known factors. Actual returns and claims in any future period are inherently uncertain and thus may differ from our estimates. If actual or expected future returns and claims are significantly greater or lower than the reserves that we have established, we will record a reduction or increase to net revenue in the period in which we make such a determination.

We accrue for discounts and rebates based on historical experience and our expectations regarding future sales to our customers. Accruals for discounts and rebates are recorded as a reduction to sales in the same period as the related revenue. Changes in such accruals may be required if future rebates and incentives differ from our estimates. We license our intellectual property including our patented technologies, trademarks, and database of control codes. When license fees are paid on a per-unit basis, we record license revenue when our customers manufacture or ship a product incorporating our intellectual property and we have a present right to payment. When a fixed up-front license

fee is received in exchange for the delivery of a particular database of infrared codes or the contract contains a minimum guarantee provision, we record revenue when delivery of the intellectual property has occurred. Tiered royalties are recorded on a straight-line basis according to the forecasted per-unit fees taking into account the pricing tiers.

Contract assets represent revenue which has been recognized based on our accounting policies but for which the customer has not yet been invoiced and thus an account receivable has not yet been recorded.

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Under prior accounting standards, prior to January 1, 2018, we recognized revenue on the sale of products when title of the goods had transferred, there was persuasive evidence of an arrangement (such as a purchase order from the customer), the sales price was fixed or determinable and collectability was reasonably assured. Revenue for term license fees were recognized on a straight-line basis over the effective term of the license when we could not reliably predict in which periods, within the term of the license, the licensee would benefit from the use of our patented inventions.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make payments for products sold or services rendered. The allowance for doubtful accounts is estimated based on a variety of factors, including credit reviews, historical experience, length of time receivables are past due, current economic trends and changes in customer payment behavior. We also record specific provisions for individual accounts when we become aware of a customer's inability to meet its financial obligations to us, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position. Our historical reserves have been sufficient to cover losses from uncollectible accounts. However, because we cannot predict future changes in the financial stability of our customers, actual future losses from uncollectible accounts may differ from our estimates and may have a material effect on our consolidated financial position, results of operations and cash flows. Inventories

Our finished good, component part, and raw material inventories are valued at the lower of cost or net realizable value. Cost is determined using the first-in, first-out method. We write down our inventory for the estimated difference between cost and estimated net realizable value based upon our best estimates of future demand and market conditions. We carry inventory in amounts necessary to satisfy our customers' inventory requirements on a timely basis. We continually monitor our inventory status to control inventory levels and write down any excess or obsolete inventories on hand. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required which may have a material impact on our financial statements. Such circumstances may include, but are not limited to, the development of new competing technology that impedes the marketability of our products or the occurrence of significant price decreases in our raw material or component parts, such as integrated circuits. Each percentage point change in the ratio of excess and obsolete inventory reserve to inventory would impact cost of sales by approximately \$1.5 million.

Valuation of Long-Lived Assets and Intangible Assets

We assess long-lived and intangible assets for impairment whenever events or changes in circumstances indicate that their carrying value may not be recoverable. Factors considered important which may trigger an impairment review, if significant, include the following:

- underperformance relative to historical or projected future operating results;
- changes in the manner of use of the assets;
- changes in the strategy of our overall business;
- negative industry or economic trends;
- a decline in our stock price for a sustained period; and
- a variance between our market capitalization relative to net book value.

If the carrying value of the asset is larger than its projected undiscounted future cash flows, the asset is impaired. The impairment is measured as the difference between the net book value of the asset and the asset's estimated fair value. Fair value is estimated utilizing the asset's projected discounted future cash flows. In assessing fair value, we must make assumptions regarding estimated future cash flows, the discount rate and other factors.

Goodwill

We evaluate the carrying value of goodwill on December 31 of each year and between annual evaluations if events occur or circumstances change that would more likely than not reduce the fair value of the reporting unit below its carrying amount. Such circumstances may include, but are not limited to: (1) a significant adverse change in legal factors or in business climate, (2) unanticipated competition or (3) an adverse action or assessment by a regulator. To evaluate whether goodwill is impaired, we conduct a two-step quantitative goodwill impairment test. In the first step we compare the estimated fair value of our single reporting unit to the reporting unit's carrying amount, including

goodwill. We estimate the fair value of our reporting unit based on income and market approaches. Under the income approach, we calculate the fair value based on the present value of estimated future cash flows. Under the market approach, we estimate the fair value based on market multiples of enterprise value to EBITDA for comparable companies. If the carrying value of the net assets assigned to the reporting

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unit exceeds the fair value of the reporting unit, then we perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. To calculate the implied fair value of the reporting unit's goodwill, the fair value of the reporting unit is first allocated to all of the other assets and liabilities of that unit based on their fair values. The excess of the reporting unit's fair value over the amount assigned to its other assets and liabilities is the implied fair value of goodwill. An impairment loss would be recognized equal to the amount by which the carrying value of goodwill exceeds its implied fair value.

Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates and operating margins used to calculate projected future cash flows, risk-adjusted discount rates, future economic and market conditions and the determination of appropriate market comparables. In addition, we make certain judgments and assumptions in determining our reporting units. We base our fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates.

Business Combinations

We allocate the purchase price of acquired businesses to the tangible and intangible assets and the liabilities assumed based on their estimated fair values on the acquisition date. The excess of the purchase price over the fair value of net assets acquired is recorded as goodwill. We engage independent third-party appraisal firms to assist us in determining the fair values of assets acquired and liabilities assumed. Such valuations require management to make significant fair value estimates and assumptions, especially with respect to intangible assets and contingent consideration.

Management estimates the fair value of certain intangible assets and contingent consideration by utilizing the following (but not limited to):

future cash flow from customer contracts, customer lists, distribution agreements, acquired developed technologies, trademarks, trade names and patents;

expected costs to complete development of in-process technology into commercially viable products and cash flows from the products once they are completed;

brand awareness and market position as well as assumptions regarding the period of time the brand will continue to be used in our product portfolio; and

discount rates utilized in discounted cash flow models.

In those circumstances where an acquisition involves a contingent consideration arrangement, we recognize a liability equal to the fair value of the contingent payments we expect to make as of the acquisition date. We re-measure this liability at each reporting period and record changes in the fair value within operating expenses. Increases or decreases in the fair value of the contingent consideration liability can result from changes in discount periods and rates, as well as changes in the timing and amount of earnings estimates or in the timing or likelihood of achieving earnings-based milestones.

Our estimates are based upon assumptions believed to be reasonable; however, unanticipated events or circumstances may occur which may affect the accuracy of our fair value estimates, including assumptions regarding industry economic factors and business strategies.

Results of operations and cash flows of acquired businesses are included in our operating results from the date of acquisition.

Income Taxes

We calculate our current and deferred tax provisions based on estimates and assumptions that may differ from the actual results reflected in our income tax returns filed during the subsequent year. We record adjustments based on filed returns when we have identified and finalized them, which is generally in the third and fourth quarters of the subsequent year.

We recognize deferred tax assets and liabilities for the expected tax consequences of temporary differences between the tax basis of assets and liabilities and their reported amounts using enacted tax rates in effect for the year in which we expect the differences to reverse. We record a valuation allowance to reduce the deferred tax assets to the amount that we are more likely than not to realize. We have considered future market growth, forecasted earnings and tax rates, future taxable income, the mix of earnings in the jurisdictions in which we operate and prudent tax planning strategies in determining the need for a valuation allowance. In the event we were to determine that we would not be

able to realize all or part of our net deferred tax assets in the future, we would increase the valuation allowance and make a corresponding charge to earnings in the period in which we make such determination. Likewise, if we later determine that we are more likely than not to realize the net deferred tax assets, we would reverse the applicable portion of the previously provided valuation allowance. In order for us to realize our deferred tax assets we must be able to generate sufficient taxable income in the tax jurisdictions in which the deferred tax assets are located. Our effective tax rate includes the impact of certain undistributed foreign earnings for which we have not provided state income taxes or foreign withholding taxes because we plan to reinvest such earnings indefinitely outside the United States. The decision to reinvest our foreign earnings indefinitely outside the United States is based on our projected cash flow needs as well as the

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working capital and long-term investment requirements of our foreign subsidiaries and our domestic operations. Material changes in our estimates of cash, working capital and long-term investment requirements in the various jurisdictions in which we do business may impact our effective tax rate.

We are subject to income taxes in the United States and foreign countries, and we are subject to routine corporate income tax audits in many of these jurisdictions. We believe that our tax return positions are fully supported, but tax authorities are likely to challenge certain positions, which may not be fully sustained. Our income tax expense includes amounts intended to satisfy income tax assessments that result from these challenges in accordance with the accounting for uncertainty in income taxes prescribed by GAAP. Determining the income tax expense for these potential assessments and recording the related assets and liabilities requires management judgments and estimates. We maintain reserves for uncertain tax positions, including related interest and penalties. We review our reserves quarterly, and we may adjust such reserves due to proposed assessments by tax authorities, changes in facts and circumstances, issuance of new regulations or new case law, previously unavailable information obtained during the course of an examination, negotiations between tax authorities of different countries concerning our transfer prices, execution of advanced pricing agreements, resolution with respect to individual audit issues, the resolution of entire audits, or the expiration of statutes of limitations. The amounts ultimately paid upon resolution of audits may be materially different from the amounts previously included in our income tax expense and, therefore, may have a material impact on our operating results, financial position and cash flows.

Stock-Based Compensation

We recognize the grant date fair value of stock-based compensation awards as expense in proportion to vesting during the requisite service period, which ranges from one to four years. Forfeitures of stock-based awards are accounted for as they occur.

We determine the fair value of restricted stock awards utilizing the average of the high and low trading prices of our Company's common shares on the date they were granted.

The fair value of stock options granted to employees and directors is determined utilizing the Black-Scholes option pricing model. The assumptions utilized in the Black-Scholes model include the risk-free interest rate, expected volatility, expected life in years and dividend yield. The risk-free interest rate over the expected term is equal to the prevailing U.S. Treasury note rate over the same period. Expected volatility is determined utilizing historical volatility over a period of time equal to the expected life of the stock option. Expected life is computed utilizing historical exercise patterns and post-vesting behavior. The dividend yield is assumed to be zero since we have not historically declared dividends and do not have any plans to declare dividends in the future.

Performance-Based Common Stock Warrants

The measurement date for performance-based common stock warrants is the date on which the warrants vest. We recognize the fair value of performance-based common stock warrants as a reduction to net sales ratably as the warrants vest based on the projected number of warrants that will vest, the proportion of the performance criteria achieved by the customer within the period relative to the total performance required (aggregate purchase levels) for the warrants to vest and the then-current fair value of the related unvested warrants. If we do not have a reliable forecast of future purchases to be made by the customer by which to estimate the number of warrants that will vest, then the maximum number of potential warrants is assumed until such time that a reliable forecast of future purchases is available. To the extent that our projections change in the future as to the number of warrants that will vest, a cumulative catch-up adjustment will be recorded in the period in which our estimates change.

The fair value of performance-based common stock warrants is determined utilizing the Black-Scholes option pricing model. The assumptions utilized in the Black-Scholes model include the price of our common stock, the risk-free interest rate, expected volatility, expected life in years and dividend yield. The price of our common stock is equal to the average of the high and low trade prices of our common stock on the measurement date. The risk-free interest rate over the expected life is equal to the prevailing U.S. Treasury note rate over the same period. Expected volatility is determined utilizing historical volatility over a period of time equal to the expected life of the warrant. Expected life is equal to the remaining contractual term of the warrant. The dividend yield is assumed to be zero since we have not historically declared dividends and do not have any plans to declare dividends in the future.

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Results of Operations

The following table sets forth our results of operations expressed as a percentage of net sales for the periods indicated.

	Year Ended December 31,			
	2018	2017	2016	
Net sales	100.0 %	100.0 %	100.0 %	
Cost of sales	79.2	76.2	74.8	
Gross profit	20.8	23.8	25.2	
Research and development expenses	3.5	3.1	3.0	
Factory transition restructuring charges		0.9	0.7	
Selling, general and administrative expenses	17.5	18.3	17.6	
Operating income (loss)	(0.2)	1.5	3.9	
Interest income (expense), net	(0.7)	(0.4)	(0.2)	
Gain on sale of Guangzhou factory	5.4			
Other income (expense), net	(0.6)	(0.1)	0.1	
Income before provision for income taxes	3.9	1.0	3.8	
Provision for income taxes	2.1	2.5	0.7	
Net income (loss)	1.8 %	(1.5)%	3.1 %	
Net income attributable to noncontrolling interest			0.0	
Net income (loss) attributable to Universal Electronics Inc.	1.8 %	(1.5)%	3.1 %	

Year Ended December 31, 2018 ("2018") Compared to Year Ended December 31, 2017 ("2017")

Net sales. Net sales for 2018 were \$680.2 million, a decrease of 2.2% compared to \$695.8 million in 2017. Net sales by our Business and Consumer lines were as follows:

	2018			2017		
	\$ (milli	ofasoof to	otal	\$ (milli	ofasoof to	otal
Business	\$619.5	91.1	%	\$642.2	92.3	%
Consumer	60.7	8.9	%	53.6	7.7	%
Total net sales	\$680.2	100.0	%	\$695.8	100.0	%

Net sales in our Business lines (subscription broadcasting, OEM, and computing companies) were 91.1% of net sales in 2018 compared to 92.3% in 2017. Net sales in our Business lines in 2018 decreased by 3.5% to \$619.5 million from \$642.2 million in 2017. The decrease in Business line net sales was driven largely by lower than normal order volume from certain subscription broadcasting customers in North America that were undergoing platform transitions in 2018. North America net sales were also adversely impacted by production delays resulting from the transition of manufacturing activities, for products destined for the U.S. market, from our China factories to our Mexico facility. This transition is in response to higher U.S. tariffs being enacted in the second half of 2018 which affect the majority of our products that are sold in the United States. Our goal is to produce the majority of our products destined for the United States in Mexico by the summer of 2019. During this transition, our net sales in a given period could be impacted. Net sales in Latin America, particularly Brazil, also decreased due to the discontinuance of certain lower margin products. These decreases in net sales were partially offset by increased net sales to consumer electronics companies in Asia and increased net sales of our home security products.

Net sales in our Consumer lines (One For All® retail and private label) were 8.9% of net sales in 2018 compared to 7.7% in 2017. Net sales in our Consumer lines in 2018 increased by 13.2% to \$60.7 million from \$53.6 million in 2017 driven primarily by growth in North America and Europe, partially offset by decreased sales in Latin America and Asia.

Gross profit in 2018 was \$141.8 million compared to \$165.7 million in 2017. Gross profit as a percent of sales decreased to 20.8% in 2018 from 23.8% in 2017. The gross margin percentage was unfavorably impacted by inflation in the cost of certain components; the strengthening of the Chinese Yuan Renminbi relative to the U.S. Dollar; factory underutilization associated with ceasing manufacturing activities while transitioning our Asia

operations onto our new global ERP system, which went live in Asia in April 2018; and asset write-downs associated with the closure and sale of our Guangzhou factory. In addition,

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in the fourth quarter of 2018, our gross margin percentage was unfavorably impacted by the transition of manufacturing activities from our China factories to our Mexico factory in an effort to mitigate the effect of increased U.S. tariffs on certain products manufactured in China and imported into the United States. In connection with this transition, we incurred direct costs relating to the movement of factory equipment and materials and duplicative labor efforts as well as indirect costs including unabsorbed duplicative overhead and manufacturing inefficiencies. We expect our gross margin rate to continue to be negatively impacted by the increased U.S. tariffs until the majority of products that are destined for the United States are manufactured outside of China. We expect this manufacturing transition to be completed by the summer of 2019.

Research and development ("R&D") expenses. R&D expenses increased 11.2% to \$23.8 million in 2018 from \$21.4 million in 2017 primarily due to our continued investment in the development of new products that enhance the user experience in home entertainment and home automation.

Factory transition restructuring charges. In the first quarter of 2016, we implemented a plan to transition manufacturing activities from our southern-most China factory, located in the city of Guangzhou in the Guangdong province, to our other China factories. As a result, we incurred severance costs of \$6.1 million in 2017. Selling, general and administrative ("SG&A") expenses. SG&A expenses decreased 6.1% to \$119.7 million in 2018 from \$127.5 million in 2017, primarily due to a decrease in the incremental amount of contingent consideration recorded in connection with our acquisitions of the net assets of Ecolink and RCS, and a decrease in stock-based compensation expense.

Interest income (expense), net. Net interest expense was \$4.7 million in 2018 compared to net interest expense of \$2.5 million in 2017. This increase was primarily attributable to an increased level of borrowings and a higher interest rate on our line of credit.

Gain on sale of Guangzhou factory. In June 2018, we completed the sale of our Guangzhou manufacturing facility in exchange for cash proceeds of \$51.3 million, resulting in a pre-tax gain of \$37.0 million.

Other income (expense), net. Net other expense was \$4.5 million in 2018 compared to net other expense of \$0.8 million in 2017. This change was driven primarily by foreign currency losses associated with fluctuations in the Chinese Yuan Renminbi and Argentinian Peso exchange rates versus the U.S. Dollar.

Income tax expense. Income tax expense was \$14.2 million in 2018 compared to \$17.6 million in 2017. Our effective tax rate was 54.4% in 2018 compared to 241.6% in 2017. The decrease in our effective tax rate was primarily due to the recording of \$16.6 million of income tax expense in 2017 representing the estimated impact of the U.S. Tax Cuts and Jobs Act that was enacted in December 2017. Additionally, our 2018 effective tax rate was negatively impacted by the recording of an \$8.1 million valuation allowance against U.S. federal and state deferred tax assets.

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016 ("2016")

Net sales. Net sales for 2017 were \$695.8 million, an increase of 6.8% compared to \$651.4 million in 2016. Net sales by our Business and Consumer lines were as follows:

2017 2016 \$ (millions) f total \$ (millions) f total Business \$642.2 92.3 % \$601.7 92.4 % Consumer 53.6 7.7 % 49.7 7.6 % Total net sales \$695.8 100.0 % \$651.4 100.0 %

Net sales in our Business lines (subscription broadcasting, OEM, and computing companies) were 92.3% of net sales in 2017 compared to 92.4% in 2016. Net sales in our Business lines in 2017 increased by 6.7% to \$642.2 million from \$601.7 million in 2016 driven primarily by the rollout of higher end platforms in Europe, increased sales of home security products and increased sales to consumer electronics companies in Asia. These increases were partially offset by a decrease in sales to North American satellite broadcasting customers as certain customers were depleting existing prior generation inventory in preparation for the launch of their new advanced platforms.

Net sales in our Consumer lines (One For All® retail and private label) were 7.7% of net sales in 2017 compared to 7.6% in 2016. Net sales in our Consumer lines in 2017 increased by 7.8% to \$53.6 million from \$49.7 million in 2016

driven primarily by growth in markets outside of Europe.

Gross profit. Gross profit in 2017 was \$165.7 million compared to \$164.1 million in 2016. Gross profit as a percent of sales decreased to 23.8% in 2017 from 25.2% in 2016. The gross margin percentage was unfavorably impacted by price reductions

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granted to certain large volume customers, impairment write-downs of underutilized factory equipment and manufacturing inefficiencies experienced due to our factory transition activities in China, which were completed in the fourth quarter of 2017. These unfavorable impacts were partially offset by the weakening of the Chinese Yuan Renminbi relative to the U.S. Dollar.

Research and development expenses. R&D expenses increased 7.9% to \$21.4 million in 2017 from \$19.9 million in 2016 primarily driven by R&D efforts dedicated to developing new product offerings for new and existing product categories.

Factory transition restructuring charges. In the first quarter of 2016, we implemented a plan to reduce the impact of rising labor rates in China by transitioning manufacturing activities from our southern-most China factory, located in the city of Guangzhou in the Guangdong province, to our other China factories. As a result, we incurred severance costs of \$6.1 million and \$4.5 million in 2017 and 2016, respectively.

Selling, general and administrative expenses. SG&A expenses increased 11.4% to \$127.5 million in 2017 from \$114.4 million in 2016. This increase was driven primarily by incremental expense recorded to reflect an increase in the value of contingent consideration to be paid in connection with our acquisition of the net assets of Ecolink; increased stock-based compensation expense; increased headcount and other direct costs associated with product development efforts as a result of an increase in the number of higher-end customer products; additional expense to support our implementation of a new ERP system; and additional expense as a result of the acquisition of the net assets of RCS in April 2017. Partially offsetting these increases was a decrease in legal expense as a result of higher legal fees, including the recording of a \$2.0 million legal settlement, in 2016 related to patent litigation matters.

Interest income (expense), net. Net interest expense was \$2.5 million in 2017 compared to net interest expense of \$1.0

million in 2016. This increase was primarily attributable to an increased level of borrowings on our line of credit. Other income (expense), net. Net other expense was \$0.8 million in 2017 compared to net other income of \$0.8 million in 2016. This change was driven primarily by a decrease in foreign currency gains associated with fluctuations in the Chinese Yuan Renminbi exchange rate versus the U.S. Dollar.

Income tax expense. Income tax expense was \$17.6 million in 2017 compared to \$4.8 million in 2016, and our effective tax rate was 241.6% in 2017 compared to 19.1% in 2016. The increase in our effective tax rate was driven by the recording of \$16.6 million of income tax expense in 2017 representing the estimated tax impact of the U.S. Tax Cuts and Jobs Act that was enacted in December 2017.

Liquidity and Capital Resources

Sources and Uses of Cash

	Year		Year		Year	
(In thousands)	Ended	Increase	Ended	Increase	Ended	
(III tilousalius)	December	(Decrease)	December	(Decrease)	December	r
	31, 2018		31, 2017		31, 2016	
Cash provided by operating activities	\$12,855	\$3,690	\$ 9,165	\$(40,378)	\$49,543	
Cash provided by (used for) investing activities	23,575	74,802	(51,227)	(13,509)	(37,718)
Cash provided by (used for) financing activities	(53,318)	(103,688)	50,370	54,816	(4,446)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	2,756	3,559	(803)	4,331	(5,134)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$(14,132)	\$(21,637)	\$ 7,505	\$5,260	\$ 2,245	

December Increase December 31, 2018 (Decrease) 31, 2017

Cash and cash equivalents \$53,207 \$(9,231) \$62,438

Working capital 100,597 26,235 74,362

Net cash provided by operating activities increased \$3.7 million in 2018 when compared to 2017, primarily due to the net impact of changes in working capital associated with accounts receivable, inventories and accounts payable,

partially offset by a \$12.3 million decrease in operating income. With respect to accounts receivable, although net sales decreased by 2.2% in 2018 compared to 2017, accounts receivable decreased by 4.5% due to both collection timing and the timing of sales in 2018. Cash outflows associated with inventories decreased as we had some buildup of inventory at the end of 2017 related to the anticipated rollout of

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higher end platforms to certain customers as well as strategic purchases of certain raw materials to take advantage of favorable pricing. Our inventory turns decreased from 3.6 turns at December 31, 2017 to 3.3 turns at December 31, 2018. We expect inventory turns to improve in 2019 as we complete the transition of manufacturing activities from China to Mexico for certain products destined for the U.S. market. Cash outflows associated with accounts payable increased largely as a result of the timing of inventory purchases in 2018.

Net cash provided by operating activities decreased \$40.4 million in 2017 when compared to 2016, primarily due to the net loss reported in 2017 and the net impact of changes in working capital needs associated with accounts receivable and inventories, partially offset by changes in the balances of income tax related assets and liabilities. With respect to accounts receivable, although net sales increased by 6.8% in 2017 compared to 2016, accounts receivable increased by 21.7% due to both collection timing and the timing of sales in 2017. At December 31, 2017, days sales outstanding was 75 days compared to 70 days at December 31, 2016. Cash outflows associated with inventories were greater in 2017 compared to 2016 primarily due the buildup of inventory described above. Our inventory turns decreased from 3.8 turns at December 31, 2016 to 3.6 turns at December 31, 2017. These cash flow impacts were partially offset by favorable cash flows associated with income taxes, which were driven by the timing of income tax payments as well as the usage of a significant portion of our deferred income tax assets in 2017 as a result of the enactment of the U.S. Tax Cuts and Jobs Act in December 2017.

Net cash provided by investing activities during 2018 was \$23.6 million compared to net cash used for investing activities of \$51.2 million and \$37.7 million during 2017 and 2016, respectively. In 2018 we received net cash proceeds of \$46.2 million for the sale of our Guangzhou factory, which was completed in June 2018. Acquisitions of property, plant and equipment returned to more normalized levels in 2018 compared to elevated levels in 2017 and 2016 which were driven by required investments in our remaining China factories to absorb the additional demand resulting from the aforementioned sale of our Guangzhou factory as well as the increased demand for our advanced remote controls. In addition, we invested in a new global ERP system which is now live in North America and Asia. In 2017, cash used for investing activities also included our acquisition of the net assets of RCS for \$8.9 million. Net cash used for financing activities was \$53.3 million during 2018 compared to net cash provided by financing activities of \$50.4 million during 2017 and net cash used for financing activities of \$4.4 million during 2016. The primary drivers of our cash flows from financing activities in 2018, 2017 and 2016 were borrowings and repayments on our line of credit and repurchases of shares of our common stock. Net payments on our line of credit were \$36.5 million in 2018, compared to net borrowings on our line of credit of \$88.0 million in 2017. With regard to stock repurchases, during 2018, we purchased 413,585 shares of our common stock at a cost of \$13.8 million, compared to 680,287 and 197,819 shares at a cost of \$39.1 million and \$12.6 million during 2017 and 2016, respectively. We hold repurchased shares as treasury stock and they are available for reissue. Presently, we have no plans to distribute these shares, although we may change these plans if necessary to fulfill our ongoing business objectives. See "ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA - Notes to Consolidated Financial Statements - Note 14" for further information regarding our share repurchase programs.

Contractual Obligations

The following table summarizes our contractual obligations and the effect these obligations are expected to have on our liquidity and cash flow in future periods.

	Payments Due by Period							
(In thousands)	Total	Less than 1 year	1 - 3 years	4 - 5 years	After 5 years			
Operating lease obligations	\$27,305	\$ 5,887	\$11,130	\$7,425	\$2,863			
Purchase obligations ⁽¹⁾	694	694		_	_			
Contingent consideration (2)	12,625	4,190	7,906	529				