SILICON LABORATORIES INC Form 10-K February 06, 2015

Use these links to rapidly review the document <u>Table of Contents</u> <u>Part IV</u>

Table of Contents

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-K**

(Mark One)

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

For the fiscal year ended January 3, 2015

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: 000-29823

# SILICON LABORATORIES INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

74-2793174 (I.R.S. Employer Identification No.)

78701

(Zip Code)

**400 West Cesar Chavez, Austin, Texas** (Address of principal executive offices)

(512) 416-8500

(Registrant's telephone number, including area code)

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

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

Securities registered pursuant to Section 12(g) of the Act: None

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Sections 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.  $\circ$  Yes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  $ilde{y}$  Sector 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 the 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ý Accelerated filer o Non-accelerated filer o Smaller reporting company o Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes ý No

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter (June 27, 2014) was \$1,981,015,271 (assuming, for this purpose, that only directors and officers are deemed affiliates).

There were 42,137,503 shares of the registrant's common stock issued and outstanding as of January 27, 2015.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the registrant's 2014 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

### **Table of Contents**

<u>Part I</u>

Page Number

<u>1 un 1</u>			
	<u>Item 1.</u>	Business	2
	Item 1A.	Risk Factors	<u>12</u>
	Item 1B.	Unresolved Staff Comments	<u>26</u>
	<u>Item 2.</u>	Properties	<u>27</u>
	<u>Item 3.</u>	Legal Proceedings	<u>27</u>
	<u>Item 4.</u>	Mine Safety Disclosures	<u>28</u>
<u>Part II</u>			
	<u>Item 5.</u>	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity	
		Securities	<u>29</u>
	<u>Item 6.</u>	Selected Financial Data	<u>31</u>
	<u>Item 7.</u>	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>32</u>
	<u>Item 7A.</u>	Quantitative and Qualitative Disclosures about Market Risk	<u>46</u>
	<u>Item 8.</u>	Financial Statements and Supplementary Data	<u>46</u>
	<u>Item 9.</u>	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	<u>46</u>
	Item 9A.	Controls and Procedures	<u>47</u>
	Item 9B.	Other Information	<u>47</u>
<u>Part III</u>			
	Item 10.	Directors, Executive Officers and Corporate Governance	<u>48</u>
	<u>Item 11.</u>	Executive Compensation	<u>51</u>
	Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>51</u>
	Item 13.	Certain Relationships and Related Transactions, and Director Independence	<u>51</u>
	<u>Item 14.</u>	Principal Accounting Fees and Services	<u>51</u>
<u>Part IV</u>			
	<u>Item 15.</u>	Exhibits and Financial Statement Schedules	<u>52</u>

#### **Cautionary Statement**

Except for the historical financial information contained herein, the matters discussed in this report on Form 10-K (as well as documents incorporated herein by reference) may be considered "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements include declarations regarding the intent, belief or current expectations of Silicon Laboratories Inc. and its management and may be signified by the words "believe," "estimate," "expect," "intend," "anticipate," "plan," "project," "will" or similar language. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties. Actual results could differ materially from those indicated by such forward-looking statements. Factors that could cause or contribute to such differences include those discussed under "Risk Factors" and elsewhere in this report. Silicon Laboratories disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

#### Part I

### Item 1. Business

### General

Silicon Laboratories Inc. designs and develops proprietary, analog-intensive, mixed-signal integrated circuits (ICs) for a broad range of applications. Mixed-signal ICs are electronic components that convert real-world analog signals, such as sound and radio waves, into digital signals that electronic products can process. Therefore, mixed-signal ICs are critical components in products addressing a variety of markets, including communications, consumer, industrial and automotive.

Our world-class, mixed-signal ICs leverage standard complementary metal oxide semiconductor (CMOS), a low cost, widely available process technology. This enables smaller, more cost effective and energy efficient solutions. Our expertise in analog-intensive, mixed-signal IC design in CMOS allows us to develop new and innovative products that are highly integrated, simplifying our customers' designs and improving their time-to-market.

#### **Industry Background**

The pervasiveness of connectivity and the explosion in mobile computing is driving semiconductor consumption. Intelligence is being added to electronic systems to enable remote monitoring, power efficiency and an improved user experience. This in turn is increasing the demand for bandwidth, requiring more infrastructure to support higher performance networks. The nearly ubiquitous availability of Internet access and the increasing intelligence of electronic devices and mobility are enabling what is called the Internet of Things (IoT), a term that describes the exponential increase in IP-enabled devices connected to the Internet.

These trends require more and more interaction between the analog world we live in and the digital world of computing, and therefore require analog-intensive, mixed-signal circuits. Traditional mixed-signal designs relied upon solutions built with numerous, complex discrete analog and digital components. While these traditional designs provide the required functionality, they are often inefficient and inadequate for use in markets where size, cost, power consumption and performance are increasingly important product differentiators. In order to improve their competitive position, electronics manufacturers need to reduce the cost and complexity of their systems and enable new features or functionality to differentiate themselves from their competitors.

Simultaneously, these manufacturers face accelerating time-to-market demands and must be able to rapidly adapt to evolving industry standards and new technologies. Because analog-intensive, mixed-signal IC design expertise is difficult to find, these manufacturers increasingly are turning to third parties, like us, to provide advanced mixed-signal solutions. Mixed-signal design requires specific expertise and relies on creative, experienced engineers to deliver solutions that optimize speed, power and performance, despite the noisy digital environment, and within the constraints of standard manufacturing processes. The development of this design expertise typically requires years of practical analog design experience under the guidance of a senior engineer, and engineers with the required level of skill and expertise are in short supply.

Many IC providers lack sufficient analog expertise to develop compelling mixed-signal ICs. As a result, manufacturers of electronic devices value IC providers that can supply them with mixed-signal solutions with greater functionality, smaller size and lower power requirements at a reduced cost and shorter time-to-market.

### Table of Contents

### Products

We provide analog-intensive, mixed-signal solutions for use in a variety of electronic products in a broad range of applications including portable devices, AM/FM radios and other consumer electronics, networking equipment, test and measurement equipment, industrial monitoring and control, home automation and customer premises equipment. Our products integrate complex mixed-signal functions that are frequently performed by numerous discrete components in competing products into a single chip or chipset. By doing so, we are able to create products that, when compared to many competing products:

Require less printed circuit board (PCB) space;

Reduce the use of external components lowering the system cost and simplifying design;

Offer superior performance improving our customers' end products;

Provide increased reliability and manufacturability, improving customer yields; and/or

Reduce system power requirements enabling smaller form factors and/or longer battery life.

We group our products into the following categories:

Broad-based products, which include our microcontroller (MCU), wireless and sensor products, timing products (clocks and oscillators), and power and isolation devices;

Broadcast products, which include our broadcast audio and video products; and

Access products, which include our Voice over IP (VoIP) products, embedded modems and our Power over Ethernet (PoE) devices.

The following table summarizes the diverse product areas and applications for the various ICs that we have introduced to customers:

### Product Areas and Description Broad-based Products

#### Microcontrollers

We offer a family of products ideal for embedded systems that include, 8-bit mixed-signal microcontrollers, 32-bit wireless MCUs and ultra low-power 32-bit MCUs based on scalable, ARM® Cortex-M0/M3/M4 cores, as well as peripheral devices such as our EZRadio® family of fully integrated, low power transceivers. These products generally integrate intelligent data capture, high performance processing, and communication interfaces in a single system on a chip. This family of products addresses a variety of end-markets, including the IoT, automotive, communications, consumer, industrial, medical and power management markets.

Applications

Connected devices for the IoT

Home automation

Security systems

Smart energy

Automotive sensors and controls

Medical instrumentation

Electronic test and measurement equipment

Industrial automation and control

Consumer electronics

Wearables

Computer peripherals

White goods

Smart metering

Remote controls

## Table of Contents

Product Areas and Description	Applications
Robust demand for bandwidth is driving the deployment of next-generation Internet infrastructure equipment to deliver higher speed, higher performance and more flexible networks. This transition puts unique requirements on the clocks and oscillators used to provide timing and synchronization for the equipment responsible for switching, transporting, processing and storing network traffic. To meet this need, we provide low jitter, frequency flexible, easily customizable timing solutions that simplify design, minimize and emprove sustem reliability. Our high performance "alock trac on a chin"	Networking equipment
family offers highly integrated single-chip IC solutions for clock synthesis and jitter attenuation, offering superior jitter performance and frequency flexibility for high data rate applications.	Telecommunications
	Optical networking
	Wireless base stations and backhaul
	Broadcast video systems
	Servers and storage systems
	Test and measurement equipment
	HDTV cameras
Power and Isolation Products	High-speed data acquisition

Our isolation techniques enable customers to meet safety standards for isolation and solve difficult electronic noise issues. Products include multi-channel isolators and isolated drivers that simplify design, improve reliability, minimize noise emissions, and reduce system cost.

Motor control

Solar inverters

Hybrid / Electric automotive drive trains

Industrial networking

Switch mode power supplies

Isolated analog data acquisition

Electronic ballasts for lighting

Sensors

Our sensor products include optical, proximity, ambient light and relative humidity (RH) / temperature sensors. These devices leverage our mixed-signal capability to provide high accuracy, quicker response time and lower power consumption than competing parts.

Consumer health & fitness (wearables)

Industrial controls

Smart home sensing

Toys and consumer electronics

Monitors and lavatory controls

**Broadcast Products** 

Video Tuners and Demodulators

Our complete, globally-compliant hybrid TV tuners with analog TV demodulator in a single CMOS IC leverage our proven digital low-IF architecture and exceed the performance of traditional discrete TV tuners, enabling TV makers to deliver improved picture quality and better reception for both analog and digital broadcasts. Our small, low power and high performance digital video demodulators support DVB-T/T2, DVB-S/S2, and/or DVB-C/C2 in a single chip and are ideal for equipment receiving digital terrestrial, satellite and/or cable services.

Integrated digital televisions (iDTV)

Free-to-Air (FtA) or pay-TV set-top box receivers

PC-TV applications

DVD/HDD personal video recorders

## Table of Contents

Product Areas and Description	Applications
<i>Broadcast Radio Receivers and Transmitters</i> Our AM and FM receivers deliver the entire tuner from antenna input to audio output in a single chip. The broadcast audio products are based on an innovative digital architecture that enables significant improvements in performance, which translates to a better consumer experience, while reducing system cost and board space for our customers.	Automotive infotainment systems
	Stand-alone AM/FM radios
	Portable audio devices
	MP3/digital media players

Navigation/GPS devices

Satellite radios

Home stereos

### Access Products

ProSLIC® Subscriber Line Interface Circuits for VoIP

Our ProSLIC provides the analog subscriber line interface on the source end of the telephone which generates dial tone, busy tone, caller ID and ring signal. Our offerings are well suited for the rapidly expanding market for Voice over IP telephony applications deployed over cable, DSL, optical and wireless fixed terminal networks.

Voice functionality for cable, DSL and optical digital modems and terminal adapters

VoIP residential gateways

ISOmodem® Embedded Modems

Wireless local loop remote access systems

PBXs

The ISOmodem embedded modems leverage innovative silicon direct access arrangement (DAA) technology and a digital signal processor to deliver a globally compliant, compact analog modem for embedded applications.	Fax machines and multi-function printers			
	Industrial monitoring			
	Postage meters			
	Security systems			
	Remote medical monitoring			
Power over Ethernet	Point of sale (POS) terminals			
Our Power over Ethernet power source equipment and powered device ICs offer highly differentiated solutions with a reduced total bill of materials (BOM) and improved performance and reliability. Our solutions offer a higher level of integration not available with competing solutions.	Enterprise networking routers and switches			

Wireless access points (WAP)

VoIP phones

Radio frequency identification (RFID) tag readers

POS terminals

Security cameras

Revenues during fiscal 2014, 2013 and 2012 were generated predominately by sales of our mixed-signal products. The following summarizes our revenue by product category (in thousands):

	Fiscal Year				
		2014		2013	2012
Broad-based	\$	317,128	\$	281,777	\$ 270,098
Broadcast		204,256		199,837	186,067
Access		99,320		98,473	107,129
Revenues	\$	620,704	\$	580,087	\$ 563,294

### **Customers, Sales and Marketing**

We market our products through our direct sales force and through a network of independent sales representatives and distributors. Direct and distributor customers buy on an individual purchase order basis, rather than pursuant to long-term agreements.

We consider our customer to be the end customer purchasing either directly from a distributor, a contract manufacturer or us. An end customer purchasing through a contract manufacturer typically instructs such contract manufacturer to obtain our products and incorporate such products with other components for sale by such contract manufacturer to the end customer. Although we actually sell the products to, and are paid by, the distributors and contract manufacturers, we refer to such end customer as our customer.

Two of our distributors, Edom Technology and Avnet, represented 20% and 12% of our revenues during fiscal 2014, respectively. No other distributor accounted for 10% or more of revenues for fiscal 2014.

During fiscal 2014, our ten largest end customers accounted for 36% of our revenues. We had one customer, Samsung, whose purchases across a variety of product areas represented 12% of our revenues during this period. Our major customers include Cisco, Garmin, Harman Becker, Huawei, LG Electronics, Pace, Samsung, Technicolor, Varian Medical Systems and ZTE.

We maintain numerous sales offices in North America, Europe and Asia. Revenue is attributed to a geographic area based on the shipped-to location. The percentage of our revenues derived from outside of the United States was 86% in fiscal 2014. For further information regarding our revenues and long-lived assets by geographic area, see Note 18, *Segment Information*, to the Consolidated Financial Statements.

Our direct sales force is comprised of a number of sales professionals who possess varied levels of responsibility and experience, including directors, country managers, regional sales managers, district sales managers, strategic account managers, field sales engineers and sales representatives. We also utilize independent sales representatives and distributors to generate sales of our products. We have relationships with many independent sales representatives and distributors worldwide whom we have selected based on their understanding of the mixed-signal IC marketplace and their ability to provide effective field sales applications support for our products.

Our marketing efforts are targeted at both identified industry leaders and emerging market participants. Direct marketing activities are supplemented by a focused marketing communications effort that seeks to raise awareness of our company and products. Our public relations efforts are focused on leading trade and business publications. Our external website is used to deliver corporate and product information. We also pursue targeted advertising in key trade publications and we have a cooperative marketing program that allows our distributors and representatives to promote our products to their local markets in conjunction with their own advertising activities. Finally, we maintain a presence at strategic trade shows and industry events. These activities, in combination with direct sales activities, help drive demand for our products.

Due to the complex and innovative nature of our ICs, we employ experienced applications engineers who work closely with customers to support the design-win process, and can significantly accelerate the customer's time to market. A design-win occurs when a customer has designed our ICs into its product architecture and ordered product from us. A considerable amount of effort to assist the customer in incorporating our ICs into its products is typically required prior to any sale. In many cases, our innovative ICs require significantly different implementations than existing approaches and, therefore, successful implementations may require extensive communication with potential customers. The amount of time required to achieve a design-win can vary substantially depending on a customer's development cycle, which can be relatively short (such as three months) or very long (such as two



### Table of Contents

years) based on a wide variety of customer factors. Not all design wins ultimately result in revenue. However, once a completed design architecture has been implemented and produced in high volumes, our customers are reluctant to significantly alter their designs due to this extensive design-win process. We believe this process, coupled with our intellectual property protection, promotes relatively longer product life cycles for our ICs and high barriers to entry for competitive products, even if such competing products are offered at lower prices. Our close collaboration with our customers provides us with knowledge of derivative product ideas or completely new product line offerings that may not otherwise arise in other new product discussions.

### **Research and Development**

Through our research and development efforts, we leverage experienced analog and mixed-signal engineering talent and expertise to create new ICs that integrate functions typically performed inefficiently by multiple discrete components. This integration generally results in lower costs, smaller die sizes, lower power demands and enhanced price/performance characteristics. We attempt to reuse successful techniques for integration in new applications where similar benefits can be realized. We believe that we have attracted many of the best engineers in our industry. We believe that reliable and precise analog and mixed-signal ICs can only be developed by teams of engineers who have significant analog experience and are familiar with the intricacies of designing these ICs for commercial volume production. The development of test methodologies is just one example of a critical activity requiring experience and know-how to enable the rapid release of a new product for commercial success. We have accumulated a vast set of trade secrets that allow us to pursue innovative approaches to mixed-signal problems that are difficult for competitors to duplicate. We highly value our engineering talent and strive to maintain a very high bar when bringing new recruits to the company.

Research and development expenses were \$173.0 million, \$157.8 million and \$138.0 million in fiscal 2014, 2013 and 2012, respectively.

### Technology

Our product development process facilitates the design of highly-innovative, analog-intensive, mixed-signal ICs. Our engineers' deep knowledge of existing and emerging standards and performance requirements helps us to assess the technical feasibility of a particular IC. We target areas where we can provide compelling product improvements. Once we have solved the primary challenges, our field application engineers continue to work closely with our customers' design teams to maintain and develop an understanding of our customers' needs, allowing us to formulate derivative products and refined features.

In providing mixed-signal ICs for our customers, we believe our key competitive advantages are:

Analog and RF design expertise in CMOS;

Digital signal processing, firmware and system design expertise;

Microcontroller and system on a chip design expertise;

Software expertise; and

Our broad understanding of systems technology and trends.

To fully capitalize on these advantages, we have assembled a world-class development team with exceptional analog and mixed-signal design expertise led by accomplished senior engineers.

### Analog and RF Design Expertise in CMOS

We believe that our most significant core competency is world-class analog and RF design capability. Additionally, we strive to design substantially all of our ICs in standard CMOS processes. While it is often significantly more difficult to design analog ICs in CMOS, CMOS provides multiple benefits versus existing alternatives, including significantly reduced cost, reduced technology risk and greater worldwide foundry capacity. CMOS is the most commonly used process technology for manufacturing digital ICs and as a result is most likely to be used for the manufacturing of ICs with finer line geometries. These finer line geometries can enable smaller and faster ICs. By designing our ICs in CMOS, we enable our products to benefit from this trend towards finer line geometries, which allows us to integrate more digital functionality into our mixed-signal ICs.

Designing analog and mixed-signal ICs is significantly more complicated than designing stand alone digital ICs. While advanced software tools exist to help automate digital IC design, there are far fewer tools for advanced analog and mixed-signal IC design. In many cases, our analog circuit design efforts begin at the fundamental transistor level. We believe that we have a demonstrated ability to design the most difficult analog and RF circuits using standard CMOS technologies.

### Digital Signal Processing, Firmware and System Design Expertise

We consider the partitioning of a circuit to be a proprietary and creative design technique. Deep systems knowledge allows us to use our digital signal processing (DSP) design expertise to maximize the price/performance characteristics of both the analog and digital functions and allow our ICs to work in an optimized manner to accomplish particular tasks. Generally, we attempt to move analog functions into the digital domain as quickly as possible, creating system efficiencies without compromising performance. These patented approaches require our advanced DSP and systems expertise. We then leverage our firmware know-how to change the 'personality' of our devices, optimizing features and functions needed by various markets we serve. For example, our broadcast audio products use a proven digital low-IF receiver and transmitter architecture to deliver superior RF performance and interference rejection compared to traditional, analog-only approaches. Digital signal processing is utilized to optimize sound quality under varying signal conditions, enabling a better consumer experience. Firmware has enabled us to rapidly expand the portfolio to address multiple markets without substantial silicon changes, including shortwave, longwave, analog tuned, digital tuned and even high performance HD-capable automotive radios.

### Microcontroller and System on a Chip Design Expertise

We have the talent and circuit integration methodologies required to combine precision analog, high-speed digital, flash memory and in-system programmability into a single, monolithic CMOS integrated circuit. Our microcontroller products are designed to capture an external analog signal, convert it to a digital signal, compute digital functions on the stream of data and then communicate the results through a standard digital interface. The ability to develop standard products with the broadest possible customer application base while being cost efficient with the silicon area of the monolithic CMOS integrated circuit requires a keen sense of customer value and engineering capabilities. Additionally, to manage the wide variety of signals on a monolithic piece of silicon including electrical noise, harmonics and other electronic distortions requires a fundamental knowledge of device physics and accumulated design expertise.

#### Software Expertise

Our software expertise allows us to develop products for markets where intelligent data capture, high-performance processing and communication are increasingly important product differentiators. The software we have developed to address these markets enable machine-to-machine communications,

### Table of Contents

providing intelligence to electronic systems. Our products integrate high-performance, low-power wireless and microcontroller ICs with reliable and scalable software into a flexible and robust networking platform.

The demand for low-power, small-footprint wireless technology is accelerating as more and more IP-enabled end points are being connected to the Internet of Things (IoT). Our software enables a broad range of power-sensitive applications for the IoT, including smart energy, home automation, security and other connected products. We believe that the combination of our software and IC design expertise differentiates us from many of our competitors.

#### Understanding of Systems Technology and Trends

Our focused expertise in mixed-signal ICs is the result of the breadth of engineering talent we have assembled with experience working in analog-intensive CMOS design for a wide variety of applications. This expertise, which we consider a competitive advantage, is the foundation of our in-depth understanding of the technology and trends that impact electronic systems and markets. Our expertise includes:

Isolation, which is critical for existing and emerging industrial applications and telecom networks;

Frequency synthesis, which is core technology for wireless and clocking applications;

Integration, which enables the elimination of discrete components in a system; and

Signal processing and precision analog, which forms the heart of consumer, industrial, medical and automotive electronics applications.

Our understanding of the role of analog/digital interfaces within electronic systems, standards evolution, and end market drivers enables us to identify product development opportunities and capitalize on market trends.

### Manufacturing

As a fabless semiconductor company, we conduct IC design and development in our facilities and electronically transfer our proprietary IC designs to third-party semiconductor fabricators who process silicon wafers to produce the ICs that we design. Our IC designs typically use industry-standard CMOS manufacturing process technology to achieve a level of performance normally associated with more expensive special-purpose IC fabrication technology. We believe the use of CMOS technology facilitates the rapid production of our ICs within a lower cost framework. Our IC production employs submicron process geometries which are readily available from leading foundry suppliers worldwide, thus increasing the likelihood that manufacturing capacity will be available throughout our products' life cycles. We currently partner with Taiwan Semiconductor Manufacturing Co. (TSMC) or TSMC's affiliates and Semiconductor Manufacturing model significantly reduces our capital requirements and allows us to focus our resources on design, development and marketing of our ICs.

Once the silicon wafers have been produced, they are shipped directly to our third-party assembly subcontractors. The assembled ICs are then moved to the final testing stage. This operation can be performed by the same contractor that assembled the IC, other third-party test subcontractors or within our internal facilities prior to shipping to our customers. During fiscal 2014, most of our units shipped were tested by offshore third-party test subcontractors. We expect that our utilization of offshore third-party test subcontractors will remain substantial during fiscal 2015.

### Table of Contents

### Backlog

As of January 3, 2015, our backlog was approximately \$122.4 million, compared to approximately \$109.9 million as of December 28, 2013. We include in backlog accepted product purchase orders from customers and worldwide distributor stocking orders. We only include orders with an expected shipping date from us within six months. Product orders in our backlog are subject to changes in delivery schedules or cancellation at the option of the purchaser typically without penalty. Our backlog may fluctuate significantly depending upon customer order patterns which may, in turn, vary considerably based on rapidly changing business circumstances. Shipments to distributors are not recognized as revenue until the products are sold by the distributors. Additionally, our arrangements with distributors typically provide for price protection and stock rotation activities. Accordingly, we do not believe that our backlog at any time is necessarily representative of actual sales for any succeeding period.

#### Competition

The markets for semiconductors generally, and for analog and mixed-signal ICs in particular, are intensely competitive. We anticipate that the market for our products will continually evolve and will be subject to rapid technological change. We believe the principal competitive factors in our industry are:

Product size;	Power requirement;
Level of integration;	Customer support;
Product capabilities;	Reputation;
Reliability;	Ability to rapidly introduce new products to market;
Price;	Intellectual property; and

Performance;

Software.

We believe that we are competitive with respect to these factors, particularly because our ICs typically are smaller in size, are highly integrated, achieve high performance specifications at lower price points than competitive products and are manufactured in standard CMOS which generally enables us to supply them on a relatively rapid basis to customers to meet their product introduction schedules. However, disadvantages we face include our relatively short operating history in certain of our markets and the need for customers to redesign their products and modify their software to implement our ICs in their products.

Due to our diversified product portfolio and the numerous markets and applications we serve, we target a relatively large number of competitors. We compete with Analog Devices, Atmel, Conexant, Cypress, Epson, Freescale, IDT, Laird, Lantiq, Marvell Technology Group, Maxim Integrated Products, MaxLinear, Microchip, Microsemi, NXP Semiconductors, Renesas, STMicroelectronics, Texas Instruments, Vectron International and others. We expect to face competition in the future from our current competitors, other manufacturers and designers of semiconductors and start-up semiconductor design companies. Our competitors may also offer bundled solutions offering a more complete product, which may negatively impact our competitive position despite the technical merits or advantages of our products. In addition, our customers could develop products or technologies internally that would replace their need for our products and would become a source of competition. We could also face competition from module makers or other systems suppliers that may include mixed-signal components in their products that could eliminate the need for our ICs.