

LITTELFUSE INC /DE  
Form 10-K  
March 01, 2016

**United States**

**Securities and Exchange Commission**

Washington, D.C. 20549

**FORM 10-K**

[X] Annual Report Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934  
(Mark one) for the fiscal year ended January 2, 2016  
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 0-20388

**LITTELFUSE, INC.**

(Exact name of registrant as specified in its charter)

Delaware 36-3795742  
(State or other jurisdiction of (I.R.S. Employer Identification No.)  
incorporation or organization)

8755 West Higgins Road, Suite 500  
Chicago, Illinois 60631  
(Address of principal executive offices) (ZIP Code)

773-628-1000

(Registrant's telephone number, including area code)

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

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

<u>Title of Each Class</u>	<u>Name of Each Exchange On Which Registered</u>
Common Stock, \$0.01 par value	NASDAQ Global Select Market <sup>SM</sup>

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

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

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

---

*(Cover continued from previous page)*

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 (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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 or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "small reporting company" in Rule 12b-2 of the Exchange Act (Check one): Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

The aggregate market value of 22,725,882 shares of voting stock held by non-affiliates of the registrant was approximately \$2,201,579,542 based on the last reported sale price of the registrant's Common Stock as reported on the NASDAQ Global Select Market<sup>SM</sup> on June 27, 2015.

As of February 19, 2016, the registrant had outstanding 22,342,813 shares of Common Stock.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Littelfuse, Inc. Proxy Statement for the 2016 Annual Meeting of Stockholders (the "Proxy Statement") are incorporated by reference into Part III of this Form 10-K.



**TABLE OF CONTENTS**

	<b>Page</b>
<b>FORWARD-LOOKING STATEMENTS</b>	4
<b>PART I</b>	
Item 1. Business.	4
Item 1A. Risk Factors.	12
Item 1B. Unresolved Staff Comments.	17
Item 2. Properties.	18
Item 3. Legal Proceedings.	20
Item 4. Mine Safety Disclosures.	20
<b>PART II</b>	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.	21
Item 6. Selected Financial Data.	23
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.	23
Item 7A. Quantitative and Qualitative Disclosures About Market Risk.	39
Item 8. Financial Statements and Supplementary Data.	41
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure. ....	78
Item 9A. Controls and Procedures.	78
Item 9B. Other Information.	79
<b>PART III</b>	
Item 10. Directors, Executive Officers and Corporate Governance.	80
Item 11. Executive Compensation.	83
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.	83
Item 13. Certain Relationships and Related Transactions, and Director Independence.	83
Item 14. Principal Accounting Fees and Services.	83
<b>PART IV</b>	
Item 15. Exhibits, Financial Statement Schedules.	84
Schedule II – Valuation and Qualifying Accounts and Reserves.	85
Signatures.	86
Exhibit Index.	87

## **FORWARD-LOOKING STATEMENTS**

Certain statements contained in this Annual Report on Form 10-K that are not historical facts are intended to constitute “forward-looking statements” entitled to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995 (“PSRLA”). These statements may involve risks and uncertainties, including, but not limited to, risks relating to product demand and market acceptance, economic conditions, the impact of competitive products and pricing, product quality problems or product recalls, capacity and supply difficulties or constraints, coal mining exposures reserves, failure of an indemnification for environmental liability, exchange rate fluctuations, commodity price fluctuations, the effect of the company’s accounting policies, labor disputes, restructuring costs in excess of expectations, pension plan asset returns less than assumed, integration of acquisitions and other risks that may be detailed in “Item 1A. Risk Factors” below and in the company’s other Securities and Exchange Commission filings.

## **PART I**

### **ITEM 1. BUSINESS.**

#### **GENERAL**

Littelfuse, Inc. and its subsidiaries (the “company” or “Littelfuse” or “we” or “our”) is the world’s leading supplier of circuit protection products for the electronics, automotive and industrial markets. In addition to the broadest and deepest portfolio of circuit protection products and solutions, the company offers electronic reed switches and sensors, automotive sensors for comfort and safety systems and a comprehensive line of highly reliable electromechanical and electronic switch and control devices for commercial and specialty vehicles, as well as protection relays and power distribution centers for the safe control and distribution of electricity. The company has a network of global engineering centers and labs that develop new products and product enhancements, provide customer application support and test products for safety, reliability and regulatory compliance.

In the electronics market, the company supplies leading manufacturers such as Alcatel-Lucent, Cisco, Celestica, Delta, Flextronics, Foxconn, Hewlett-Packard, HTC, Huawei, IBM, Intel, Jabil, LG, Motorola, Nokia, Panasonic, Quanta, Samsung, Sanmina-SCI, Seagate, Siemens and Sony. The company is also the leading provider of circuit protection for the automotive industry and the third largest producer of electrical fuses in North America. In the automotive passenger car and commercial vehicle market, the company’s end customers include original equipment manufacturers (“OEM”) in North America, Europe and Asia such as BMW, Caterpillar, Chrysler, Daimler Trucks NA, Ford Motor Company, General Motors, Hyundai Group and Volkswagen. The company also supplies wiring harness manufacturers and auto parts suppliers worldwide, including Advance Auto Parts, Continental, Delphi, Lear, Leoni, O’Reilly Auto Parts, Pep Boys, Sumitomo, Valeo and Yazaki. In the automotive sensor market, the company end customers include GM, Autoliv, Delphi, Key Safety Systems and Stabilus. In the industrial market, the company

supplies representative customers such as Abbott, Acuity Brands, Applied Materials, Caterpillar, Cummins Engine, First Solar, GE, Generac, Heinz, Ingersoll-Rand, John Deere, Lennox, Merck, Poland Springs, Procter & Gamble, Rockwell, Schneider, United Technologies and 3M. The company also supplies industrial ground fault protection in mining and other large industrial operations to customers such as Agrium, Cameco, Mosaic and Potash Corporation of Saskatchewan. See “Business Environment: Circuit Protection Market.”

The company reports its operations by three business segments: Electronics, Automotive and Industrial (formerly Electrical). For segment and geographical information and consolidated net sales and operating earnings see “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Note 15 of the Notes to Consolidated Financial Statements included in this report.

On October 1, 2015, the company acquired 100% of Sigmar S.r.l. (“Sigmar”) for \$5.4 million (net of cash acquired). Located in Ozegna, Italy, Sigmar is a leading global manufacturer of water-in-fuel and selective catalytic reduction (SCR) quality sensors, as well as diesel fuel heaters, solenoid valves and rotating oil filters for automotive and commercial vehicle applications. The acquisition further expands the company’s automotive sensor product line offerings within its Automotive business segment. The company funded the acquisition with available cash.

On January 3, 2014, the company acquired 100% of SymCom, Inc. (“SymCom”) for \$52.8 million (net of cash acquired). Located in Rapid City, South Dakota, SymCom provides overload relays and pump controllers primarily to the industrial market. The acquisition allows the company to strengthen its position in the relay products market by adding new products and new customers within its Industrial business segment. The company funded the acquisition with available cash and proceeds from credit facilities.

Net sales by business segment for the periods indicated are as follows (in thousands):

	<b>Fiscal Year</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Electronics	\$405,497	\$410,065	\$367,052
Automotive	339,957	325,415	267,207
Industrial	122,410	116,515	123,594
Total	\$867,864	\$851,995	\$757,853

The company operates in three geographic regions: the Americas, Europe and Asia-Pacific. The company manufactures products and sells to customers in all three regions.

Net sales in the company’s three geographic regions, based upon the shipped-to destination, are as follows (in thousands):

	<b>Fiscal Year</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Americas	\$401,173	\$377,660	\$342,353
Europe	152,661	163,918	136,814
Asia-Pacific	314,030	310,417	278,686
Total	\$867,864	\$851,995	\$757,853

The company’s products are sold worldwide through distributors, a direct sales force and manufacturers’ representatives. For the fiscal year 2015, approximately 60% of the company’s net sales were to customers outside the



United States, including approximately 22% to China.

The company manufactures many of its products on fully integrated manufacturing and assembly equipment. The company maintains product quality through a Global Quality Management System with most manufacturing sites certified under ISO 9001:2000. In addition, several of the Littelfuse manufacturing sites are also certified under TS 16949 and ISO 14001.

References herein to “2015”, “fiscal 2015” or “fiscal year 2015” refer to the fiscal year ended January 2, 2016. References herein to “2014”, “fiscal 2014” or “fiscal year 2014” refer to the fiscal year ended December 27, 2014. References herein to “2013”, “fiscal 2013” or “fiscal year 2013” refer to the fiscal year ended December 28, 2013. The company operates on a “4-4-5” fiscal calendar that normally keeps the number of weeks constant during each quarter except during a leap year, which occurred in fiscal 2015. As a result of using this convention, each of fiscal 2014 and fiscal 2013 contained 52 weeks whereas fiscal 2015 contained 53 weeks.

The company’s annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form

8-K and all amendments to those reports are available free of charge through the “Investor Relations” section of the company’s Internet website (<http://www.littelfuse.com>), as soon as practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission (the “SEC”), accessible via a link to the website maintained by the SEC. Except as otherwise provided herein, such information is not incorporated by reference into this Annual Report on Form 10-K.

## BUSINESS ENVIRONMENT: CIRCUIT PROTECTION MARKET

### **Electronic Products**

Electronic circuit protection products are used to protect circuits in a multitude of electronic systems. The company’s product offering includes a complete line of overcurrent and overvoltage solutions, as well as sensors, including (i) fuses and protectors, (ii) positive temperature coefficient (“PTC”) resettable fuses, (iii) varistors, (iv) polymer electrostatic discharge (“ESD”) suppressors, (v) discrete transient voltage suppression (“TVS”) diodes, TVS diode arrays and protection thyristors, (vi) gas discharge tubes, (vii) power switching components, (viii) fuseholders, and (ix) reed switch and sensor assemblies, blocks and related accessories.

Electronic fuses and protectors are devices that contain an element that melts in an overcurrent condition. Electronic miniature and subminiature fuses are designed to provide circuit protection in the limited space requirements of electronic equipment. The company’s fuses are used in a wide variety of electronic products, including mobile phones, flat-screen TVs, computers and telecommunications equipment. The company markets these products under trademarked brand names including PICO® II and NANO2® SMF.

Resettable fuses are PTC polymer devices that limit the current when an overcurrent condition exists and then reset themselves once the overcurrent condition has cleared. The company’s product line offers both radial leaded and surface mount products. Varistors are ceramic-based, high-energy absorption devices that provide transient overvoltage and surge suppression for automotive, telecommunication, consumer electronics and industrial applications. The company’s product line offers both radial leaded and multilayer surface mount products.

Polymer ESD suppressors are polymer-based devices that protect an electronic system from failure due to rapid transfer of electrostatic charge to the circuit. The company's PulseGuard® line of ESD suppressors is used in PC and PC peripherals, digital consumer electronics and wireless applications.

Discrete diodes, diode arrays and protection thyristors are fast switching silicon semiconductor structures. Discrete diodes protect a wide variety of applications from overvoltage transients such as ESD, inductive load switching or lightning, while diode arrays are used primarily as ESD suppressors. Protection thyristors are commonly used to protect telecommunications circuits from overvoltage transients such as those resulting from lightning. Applications include telephones, modems, data transmission lines and alarm systems. The company markets these products under trademarked brand names including TECCOR®, SIDACtor®, Batrax® and SPA®.

Gas discharge tubes are very low capacitance devices designed to suppress any transient voltage event that is greater than the breakover voltage of the device. These devices are primarily used in telecommunication interface and conversion equipment applications as protection from overvoltage transients such as lightning.

Power switching components are used to regulate energy to various types of loads most commonly found in industrial and home applications. These components are easily activated from simple control circuits or interfaced to computers for more complex load control. Typical applications include heating, cooling, battery chargers and lighting.

Magnetic sensing products are used to monitor, sense and measure magnetic fields in a number of applications. The company's product offerings include a line of reed switches, reed based sensors and hall effect sensors. Reed switches are non-contact magnetically operated devices that provide an output based on the electrical load during the presence of magnetic field. They are used in a wide variety of applications including security, medical, fluid monitoring, telephones, fitness equipment, metering, toys, white goods and consumer and industrial controls. Reed switch sensors utilize reed switch technology in various packaging configurations with custom enclosures, terminations and connectors to provide an application specific product as a final assembly. Key applications include fluid level monitoring, position sensing, fluid flow and proximity sensing. Hall effect sensors utilize hall chip technology to sense magnetic fields to provide ratio metric output based on magnetic fields. Key applications include motor speed sensing, directional sensing, rotation and linear sensing.

In addition to the above products, the company is also a supplier of fuse holders, fuse blocks (including OMNI-BLOK®) and fuse clips primarily to customers that purchase circuit protection devices from the company.

### **Automotive Products**

Fuses are extensively used in automobiles, trucks, buses and off-road equipment to protect electrical circuits and the wires that supply electrical power to operate lights, heating, air conditioning, radios, windows and other controls. Currently, a typical automobile contains 30 to 100 fuses, depending upon the options installed. The fuse content per vehicle is expected to continue to grow as more electronic features are included in automobiles. The company also supplies fuses for the protection of electric and hybrid vehicles.

The company is a primary supplier of automotive fuses to United States, Asian and European automotive OEMs, automotive component parts manufacturers and automotive parts distributors. The company also sells its fuses in the replacement parts market, with its products being sold through merchandisers, discount stores and service stations, as well as under private label by national firms. The company invented and owns U.S. and foreign patents related to blade-type fuses, which is the standard and most commonly used fuse in the automotive industry. The company's automotive fuse products are marketed under trademarked brand names, including ATO®, MINI®, MIDI®, MEGA®, Masterfuse,<sup>TM</sup>JCASE® and CablePro®.

A majority of the company's automotive fuse sales are made to main-fuse box and wire harness manufacturers that incorporate the fuses into their products. The remaining automotive fuse sales are made directly to automotive manufacturers, retailers who sell automotive parts and accessories, and distributors who in turn sell most of their products to wholesalers, service stations and non-automotive OEMs.

7

---

The company has expanded into the automotive sensor market with the acquisitions of Sigmar, Hamlin and Accel AB. Additional products in this market include advanced electromechanical, occupant safety sensors, solar sensors, fluid quality sensors and fuel heating systems.

The company has expanded the Automotive Business Segment into the commercial vehicle market with the acquisitions of Cole Hersee and Terra Power. Additional products in this market include: power distribution modules, low current switches, high current switches, solenoids and relays, electronic switches, battery management products and ignition key switches.

### **Industrial Products**

The company manufactures and sells a broad range of low-voltage and medium-voltage circuit protection products to electrical distributors and their customers in the construction, OEM and industrial maintenance, repair and operating supplies (“MRO”) markets. The company also designs and manufactures portable custom electrical equipment for the mining and utility industry in Canada as well as protection relays for the global mining, oil and gas and general industrial markets.

Power fuses are used to protect circuits in various types of industrial equipment and in industrial and commercial buildings. They are rated and listed under one of many Underwriters Laboratories’ fuse classifications. Major applications for power fuses include protection from overload and short-circuit currents in solar, motor branch circuits, heating and cooling systems, control systems, lighting circuits, solar and electrical distribution networks.

The company’s POWR-GARD® product line features the Indicator® series power fuse used in both the OEM and MRO markets. The Indicator® technology provides visual blown-fuse indication at a glance, reducing maintenance and downtime on production equipment. The Indicator® product offering is widely used in motor protection and industrial control panel applications.

Protection relays are used to protect personnel and equipment in mining, oil & gas and industrial environments from excessive currents, over voltages and electrical shock hazards called ground faults. Major applications for protection relays include protection of motor, transformer and power-line distribution circuits. Ground-fault relays are used to protect personnel and equipment in wet environments such as underground mining or water treatment applications where there is a greater risk for electricity to come in contact with water and create a shock hazard.

Littelfuse custom-engineered electrical equipment is designed and built for use in harsh or demanding environments where standard industrial electrical gear will not meet customer needs for reliability and durability. Portable power substations are used throughout mines to transform voltage from distribution to utilization levels and provide local

protection and control for equipment such as mining machines, pumps, fans, conveyors, and other electrical machinery. Custom-built switchgear is used in mining, oil and gas, and power generation where rugged designs, quick turnaround, unique footprints, or arc-resistant equipment is required. E-Houses, complete with switchgear, protective-relay panels, and other related equipment, are designed and built in the company's factory and then shipped to remote sites with potentially extreme environments where a permanent structure may not be feasible or economical.

## PRODUCT DESIGN AND DEVELOPMENT

The company employs scientific, engineering and other personnel to continually improve its existing product lines and to develop new products at its research, product design and development ("R&D") and engineering facilities in Champaign and Mt. Prospect, Illinois, Boston, Massachusetts, Canada, China, Denmark, Italy, the Philippines, Taiwan, Lithuania and Mexico. The Product & Development Technology departments maintain a staff of engineers, chemists, material scientists and technicians whose primary responsibility is to design and develop new products.

Proposals for the development of new products are initiated primarily by sales and marketing personnel with input from customers. The entire product development process usually ranges from a few months to 18 months based on the complexity of development, with continuous efforts to reduce the development cycle. During fiscal years 2015, 2014 and 2013, the company expended \$30.8 million, \$31.1 million and \$24.4 million, respectively, on R&D.

## PATENTS, TRADEMARKS AND OTHER INTELLECTUAL PROPERTY

The company generally relies on patents, trademarks, licenses and nondisclosure agreements to protect its intellectual property and proprietary products. In cases where it is deemed necessary by management, key employees are required to sign an agreement that they will maintain the confidentiality of the company's proprietary information and trade secrets.

As of January 2, 2016, the company owned 640 worldwide patents including 289 patents in the United States and 351 patents in other countries. The company also has registered trademark protection for certain of its brand names and logos. The 640 worldwide patents are in the following product categories: 346 electronics, 227 automotive and 67 industrial. Patents and licenses are amortized over a period of 7-50 years, with a weighted average life of 11.6 years. Distribution networks are amortized over a period of 3-20 years, with a weighted average life of 12.4 years. Trademarks and tradenames are amortized over a period of 5-20 years, with a weighted average life of 13.0 years. The company recorded amortization expense of \$11.9 million, \$12.5 million and \$9.3 million in 2015, 2014 and 2013, respectively, related to amortizable intangible assets.

New products are continually being developed to replace older products. The company regularly applies for patent protection on such new products. Although, in the aggregate, the company's patents are important in the operation of its businesses, the company believes that the loss by expiration or otherwise of any one patent or group of patents would not materially affect its business.

License royalties amounted to \$0.4 million, \$0.5 million and \$0.6 million for fiscal 2015, 2014 and 2013, respectively, and are included in other expense (income), net on the Consolidated Statements of Net Income.

## MANUFACTURING

The company performs the majority of its own fabrication, stamps some of the metal components used in its fuses, holders and switches from raw metal stock and makes its own contacts and springs. In addition, the company fabricates silicon wafers for certain applications and performs its own plating (silver, nickel, zinc, tin and oxides). All



thermoplastic molded component requirements used for such products as the ATO® and MINI® fuse product lines are met through the company's in-house molding capabilities. After components are stamped, molded, plated and readied for assembly, final assembly is accomplished on fully automatic and semi-automatic assembly machines. Quality assurance and operations personnel, using techniques such as statistical process control, perform tests, checks and measurements during the production process to maintain the highest levels of product quality and customer satisfaction.

The principal raw materials for the company's products include copper and copper alloys, heat-resistant plastics, zinc, melamine, glass, silver, gold, raw silicon, solder and various gases. The company uses a sole source for several heat-resistant plastics and for zinc, but believes that suitable alternative heat-resistant plastics and zinc are available from other sources at comparable prices. All other raw materials are purchased from a number of readily available outside sources.

A computer-aided design and manufacturing system (CAD/CAM) expedites product development and machine design and the company's laboratories test new products, prototype concepts and production run samples. The company participates in "just-in-time" delivery programs with many of its major suppliers and actively promotes the building of strong cooperative relationships with its suppliers by utilizing early supplier involvement techniques and engaging them in pre-engineering product and process development.

## MARKETING

The company's domestic sales and marketing staff of over 100 people maintains relationships with major OEMs and distributors. The company's sales, marketing and engineering personnel interact directly with OEM engineers to ensure appropriate circuit protection and reliability within the parameters of the OEM's circuit design. Internationally, the company maintains a sales and marketing staff of over 100 people with sales offices in the U.K., Germany, Spain, Brazil, Singapore, Taiwan, Japan, Hong Kong, Korea, China and India. The company also markets its products indirectly through a worldwide organization of over 60 manufacturers' representatives and distributes through an extensive network of electronics, automotive and electrical distributors.

### **Electronics**

The company uses manufacturers' representatives to sell its electronics products domestically and to call on major domestic and international OEMs and distributors. The company sells approximately 15% of its domestic products directly to OEMs, with the remainder sold through distributors nationwide.

In the Asia-Pacific region, the company maintains a direct sales staff and utilizes distributors in Japan, Singapore, Korea, Taiwan, China, Malaysia, Hong Kong, India and the Philippines. In the Americas, the company maintains a direct sales staff in the U.S. and Brazil and utilizes manufacturers' representatives and distributors in Canada. In Europe, the company maintains a direct sales force and utilizes manufacturers' representatives and distributors to support a wide array of customers.

### **Automotive**

The company maintains a direct sales force to service all the major automotive and commercial vehicle OEMs and system suppliers domestically. Over 20 manufacturers' representatives sell the company's products to aftermarket fuse retailers such as O'Reilly Auto Parts and Pep Boys. The company also uses about 15 manufacturers' representatives to sell to the commercial vehicle aftermarket.

In Europe, the company uses both a direct sales force and manufacturers' representatives to distribute its products to OEMs, major system suppliers and aftermarket distributors. In the Asia-Pacific region, the company uses both a direct sales force and distributors to supply to major OEMs and system suppliers.

**Industrial**

The company markets and sells its power fuses and protection relays through more than 50 manufacturers' representatives across North America. These representatives sell power fuse products through an electrical and industrial distribution network comprised of over 2,500 distributor buying locations. These distributors have customers that include electrical contractors, municipalities, utilities and factories (including both MRO and OEM).

The company's field sales force (including regional sales managers and application engineers) and manufacturers' representatives call on both distributors and end-users (consulting engineers, municipalities, utilities and OEMs) in an effort to educate these customers on the capabilities and characteristics of the company's products.

## CUSTOMERS

The company sells to over 5,800 customers and distributors worldwide. No single customer accounted for more than 10% of net sales during any of the last three years. During fiscal 2015, 2014 and 2013, net sales to customers outside the United States accounted for approximately 60%, 63% and 64%, respectively, of the company's total net sales.

## COMPETITION

The company's products compete with similar products of other manufacturers, some of which have substantially greater financial resources than the company. In the electronics market, the company's competitors include Cooper Industries (a subsidiary of Eaton Corporation plc), Bel Fuse Inc., Bourns Inc., EPCOS, On Semiconductor Corporation, STMicroelectronics NV, Semtech Corporation, Vishay Intertechnology Inc, and TE Connectivity Ltd. In the automotive market, the company's competitors include Cooper Industries, Pacific Engineering (a private company in Japan), MTA (a private company in Italy), D&R Technologies (a subsidiary of CTS Corporation) and Sensata Technologies Holding NV. In the industrial market, the company's major competitors include Cooper Industries, GE Multilin and Mersen. The company believes that it competes on the basis of innovative products, the breadth of its product line, the quality and design of its products and the responsiveness of its customer service, in addition to price.

## BACKLOG

The backlog of unfilled orders at January 2, 2016 was approximately \$96.4 million, compared to \$92.9 million at December 27, 2014. Substantially all of the orders currently in backlog are scheduled for delivery in 2016.

## EMPLOYEES

As of January 2, 2016, the company employed approximately 8,800 employees worldwide. Approximately 1,900 employees in Mexico are covered by collective bargaining agreements. In Mexico the company has two separate collective bargaining agreements, one for 1,200 employees in Piedras Negras, expiring January 31, 2018 and the second for 720 employees in Matamoros, expiring January 1, 2018. Approximately 22% of the company's total workforce was employed under collective bargaining agreements at January 2, 2016. The company has no employees covered by a collective bargaining agreement that will expire within one year of January 2, 2016. The Germany collective bargaining agreement, which covers three employees in Essen, will expire March 31, 2016.

Overall, the company has historically maintained satisfactory employee relations and considers employee relations to be good.

#### ENVIRONMENTAL REGULATION

The company is subject to numerous foreign, federal, state and local regulations relating to air and water quality, the disposal of hazardous waste materials, safety and health. Compliance with applicable environmental regulations has not significantly changed the company's competitive position, capital spending or earnings in the past and the company does not presently anticipate that compliance with such regulations will change its competitive position, capital spending or earnings for the foreseeable future.

The company employs a chemical engineer to monitor regulatory matters and believes that it is currently in compliance in all material respects with applicable environmental laws and regulations.

Littelfuse GmbH, which was acquired by the company in May 2004, is responsible for maintaining closed coal mines from legacy operations. The company is compliant with German regulations pertaining to the maintenance of the mines and has an accrual related to certain of these coal mine shafts based on an engineering study estimating the cost of remediating the dangers (such as a shaft collapse) of certain of these closed coal mine shafts in Germany. The accrual is reviewed annually and calculated based upon the cost of remediating the shafts. Further information regarding the coal mine liability accrual is provided in Note 10 of the Notes to Consolidated Financial Statements included in this report.

#### **ITEM 1A. RISK FACTORS.**

Our business, financial condition and results of operations are subject to various risks and uncertainties, including the risk factors we have identified below. These factors are not necessarily listed in order of importance. We may amend or supplement the risk factors from time to time by other reports that we file with the SEC in the future.

Our industry is subject to intense competitive pressures.

We operate in markets that are highly competitive. We compete on the basis of price, quality, service and/or brand name across the industries and markets we serve. Competitive pressures could affect the prices we are able to charge our customers or the demand for our products.

We may not always be able to compete on price, particularly when compared to manufacturers with lower cost structures. Some of our competitors have substantially greater sales, financial and manufacturing resources and may have greater access to capital than Littelfuse. As other companies enter our markets or develop new products, competition may further intensify. Our failure to compete effectively could materially adversely affect our business, financial condition and results of operations.

We may be unable to manufacture and deliver products in a manner that is responsive to our customers' needs.

The end markets for our products are characterized by technological change, frequent new product introductions and enhancements, changes in customer requirements and emerging industry standards. The introduction of products

embodying new technologies and the emergence of new industry standards could render our existing products obsolete and unmarketable before we can recover any or all of our research, development and commercialization expenses on capital investments. Furthermore, the life cycles of our products may change and are difficult to estimate.

Our future success will depend upon our ability to manufacture and deliver products in a manner that is responsive to our customers' needs. We will need to develop and introduce new products and product enhancements on a timely basis that keep pace with technological developments and emerging industry standards and address increasingly sophisticated requirements of our customers. We invest heavily in research and development without knowing that we will recover these costs. Our competitors may develop products or technologies that will render our products non-competitive or obsolete. If we cannot develop and market new products or product enhancements in a timely and cost-effective manner, our business, financial condition and results of operations could be materially adversely affected.

Our business may be interrupted by labor disputes or other interruptions of supplies.

A work stoppage could occur at certain of our facilities, most likely as a result of disputes under collective bargaining agreements or in connection with negotiations of new collective bargaining agreements. In addition, we may experience a shortage of supplies for various reasons, such as financial distress, work stoppages, natural disasters or production difficulties that may affect one of our suppliers. A significant work stoppage, or an interruption or shortage of supplies for any reason, if protracted, could substantially adversely affect our business, financial condition and results of operations. The transfer of our manufacturing operations and changes in our distribution model could disrupt operations for a limited time.

Our revenues may vary significantly from period to period.

Our revenues may vary significantly from one accounting period to another due to a variety of factors including:

changes in our customers' buying decisions;

changes in demand for our products;

changes in our distributor inventory stocking;

our product mix;

our effectiveness in managing manufacturing processes;

costs and timing of our component purchases;

the effectiveness of our inventory control;

the degree to which we are able to utilize our available manufacturing capacity;

our ability to meet delivery schedules;

general economic and industry conditions;

local conditions and events that may affect our production volumes, such as labor conditions and political instability;  
and

seasonality of certain product lines.

The bankruptcy or insolvency of a major customer could adversely affect us.



The bankruptcy or insolvency of a major customer could result in lower sales revenue and cause a material adverse effect on our business, financial condition and results of operations. In addition, the bankruptcy or insolvency of a major U.S. auto manufacturer or significant supplier likely could lead to substantial disruptions in the automotive supply base, resulting in lower demand for our products, which likely would cause a decrease in sales revenue and have a substantial adverse impact on our business, financial condition and results of operations.

Our ability to manage currency or commodity price fluctuations or shortages is limited.

As a resource-intensive manufacturing operation, we are exposed to a variety of market and asset risks, including the effects of changes in foreign currency exchange rates, commodity prices and interest rates. We have multiple sources of supply for the majority of our commodity requirements. However, significant shortages that disrupt the supply of raw materials or result in price increases could affect prices we charge our customers, our product costs and the competitive position of our products and services. We monitor and manage these exposures as an integral part of our overall risk management program, which recognizes the unpredictability of markets and seeks to reduce the potentially adverse effects on our results. Nevertheless, changes in currency exchange rates, commodity prices and interest rates cannot always be predicted. In addition, because of intense price competition and our high level of fixed costs, we may not be able to address such changes even if they are foreseeable. Substantial changes in these rates and prices could have a material adverse effect on our results of operations and financial condition. In addition, significant portions of our revenues and earnings are exposed to changes in foreign currency rates. As we operate in multiple foreign currencies, changes in those currencies relative to the U.S. dollar will impact our revenues and expenses. The impact of possible currency devaluation in countries experiencing high inflation rates or significant exchange fluctuations can impact our results and financial guidance. For additional discussion of interest rate, currency or commodity price risk, see "Item 7A. Quantitative and Qualitative Disclosures about Market Risks."

Operations and supply sources located outside the United States, particularly in emerging markets, exposes us to political, economic and other risks.

Our operating activities outside the United States contribute significantly to our revenues and earnings. Serving a global customer base and remaining competitive in the global marketplace requires the company to place our production in countries outside the United States, including emerging markets, to capitalize on market opportunities and maintain a cost-efficient structure. In addition, we source a significant amount of raw materials and other components from third-party suppliers in low-cost countries. Our international operating activities are subject to a number of risks generally associated with international operations, including risks relating to the following:

- general economic conditions;
- currency fluctuations and exchange restrictions;
- import and export duties and restrictions;
- the imposition of tariffs and other import or export barriers;
- compliance with regulations governing import and export activities;
- current and changing regulatory requirements;
- political and economic instability;
- potentially adverse income tax consequences;
- transportation delays and interruptions;
- labor unrest;
- natural disasters;
- terrorist activities;
- public health concerns;
- difficulties in staffing and managing multi-national operations; and

limitations on our ability to enforce legal rights and remedies.

Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

We engage in acquisitions and may encounter difficulties in integrating these businesses.

We are a company that, from time to time, seeks to grow through strategic acquisitions. We have in the past acquired a number of businesses or companies and additional product lines and assets. We intend to continue to expand and diversify our operations with additional acquisitions. The success of these transactions depends on our ability to integrate the assets and personnel acquired in these acquisitions. We may encounter difficulties in integrating acquisitions with our operations, material weaknesses in the acquired company's internal control environment and may not realize the degree or timing of the benefits that we anticipated from an acquisition.

We may also discover liabilities or deficiencies associated with the companies or assets we acquire that were not identified in advance, which may result in significant unanticipated costs. The effectiveness of our due diligence review and our ability to evaluate the results of such due diligence are dependent upon the accuracy and completeness of statements and disclosures made or actions taken by the companies we acquire or their representatives, as well as the limited amount of time in which acquisitions are executed. In addition, we may fail to accurately forecast the financial impact of an acquisition transaction, including tax and accounting charges. Acquisitions may also result in our recording of significant additional expenses to our results of operations and recording of substantial finite-lived intangible assets on our balance sheet upon closing. Any of these factors may adversely affect our financial condition or results of operations.

Reorganization activities may lead to additional costs and material adverse effects.

We are a company that, from time to time, seeks to optimize its production and manufacturing capabilities and efficiencies through relocations, consolidations, plant closings or asset sales. We may make further specific determinations to consolidate, close or sell additional facilities. Possible adverse consequences related to such actions may include various charges for such items as idle capacity, disposition costs and severance costs, in addition to normal or attendant risks and uncertainties. We may be unsuccessful in any of our current or future efforts to restructure or consolidate our business. Our plans to minimize or eliminate any loss of revenues during restructuring or consolidation may not be achieved. These activities may have a material adverse effect upon our business, financial condition or results of operations.

Environmental liabilities could adversely impact our financial position.

Foreign, federal, state and local laws and regulations impose various restrictions and controls on the discharge of materials, chemicals and gases used in our manufacturing processes or in our finished goods. These environmental regulations have required us to expend a portion of our resources and capital on relevant compliance programs. Under these laws and regulations, we could be held financially responsible for remedial measures if our current or former

properties are contaminated or if we send waste to a landfill or recycling facility that becomes contaminated, even if we did not cause the contamination. We may be subject to additional common law claims if we release substances that damage or harm third parties. In addition, future changes in environmental laws or regulations may require additional investments in capital equipment or the implementation of additional compliance programs. Any failure to comply with new or existing environmental laws or regulations could subject us to significant liabilities and could have a material adverse effect on our business, financial condition or results of operations.

In the conduct of our manufacturing operations, we have handled and do handle materials that are considered hazardous, toxic or volatile under federal, state and local laws. The risk of accidental release of such materials cannot be completely eliminated. In addition, we operate or own facilities located on or near real property that was formerly owned and operated by others. Certain of these properties were used in ways that involved hazardous materials. Contaminants may migrate from, within or through these properties. These releases or migrations may give rise to claims. Where third parties are responsible for contamination, the third parties may not have funds, or not make funds available when needed, to pay remediation costs imposed upon us under environmental laws and regulations.

The company is responsible for the maintenance of discontinued coal mining operations in Germany. The risk of environmental remediation exists and the company is in the process of remediating the mines considered to be the most at risk.

Disruptions in our manufacturing, supply or distribution chain could result in an adverse impact on results of operations.

A disruption could occur within our manufacturing, distribution or supply chain network. This could include damage or destruction due to natural disasters or political instability which would cause one or more of these network channels to become non-operational. This could adversely affect our ability to manufacture or deliver our products in a timely manner, impair our ability to meet customer demand for products and result in lost sales or damage to our reputation. Such a disruption could have a material adverse effect upon our business, financial condition or results of operations.

We derive a substantial portion of our revenues from customers in the automotive, consumer electronics and communications industries, and we are susceptible to trends and factors affecting those industries including unexpected product recalls as well as the success of our customers' products.

Net sales to the automotive, consumer electronics and communications industries represent a substantial portion of our revenues. Factors negatively affecting these industries and the demand for products also negatively affect our business, financial condition or results of operations. Any adverse occurrence, including industry slowdown, recession, political instability, costly or constraining regulations, armed hostilities, terrorism, excessive inflation, prolonged disruptions in one or more of our customers' production schedules, unexpected product recalls or labor disturbances, that results in significant decline in the volume of sales in these industries, or in an overall downturn in the business and operations of our customers in these industries, could materially adversely affect our business, financial condition or results of operations. For example, the automotive industry as well as the consumer electronics market is highly cyclical in nature and sensitive to changes in general economic conditions, consumer preferences and interest rates. In addition, the global automotive and electronic industries have overall manufacturing capacity far exceeding demand. To the extent that demand for certain of our customers' products declines, the demand for our products may decline. Reduced demand relating to general economic conditions, consumer preferences, interest rates or industry over-capacity may have a material adverse effect upon our business, financial condition or results of operations.

The inability to maintain access to capital markets may adversely affect our business and financial results.

Our ability to invest in our businesses, make strategic acquisitions and refinance maturing debt obligations may require access to the capital markets and sufficient bank credit lines to support short-term borrowings. If we are unable to access the capital markets or bank credit facilities, we could experience a material adverse effect on our business, financial condition and results of operations.

Fixed costs may reduce operating results if our sales fall below expectations.

Our expense levels are based, in part, on our expectations for future sales. Many of our expenses, particularly those relating to capital equipment and manufacturing overhead, are relatively fixed. We might be unable to reduce spending quickly enough to compensate for reductions in sales. Accordingly, shortfalls in sales could materially and adversely affect our operating results.

The volatility of our stock price could affect the value of an investment in our stock and our future financial position.

The market price of our stock can fluctuate widely. Between December 27, 2014 and January 2, 2016, the closing sale price of our common stock ranged between a low of \$83.06 and a high of \$114.09. The volatility of our stock price may be related to any number of factors, such as volatility in the financial markets, general macroeconomic conditions, industry conditions, analysts' expectations concerning our results of operations, or the volatility of our revenues as discussed above under "Our Revenues May Vary Significantly from Period to Period." The historic market price of our common stock may not be indicative of future market prices. We may not be able to sustain or increase the value of our common stock. Declines in the market price of our stock could adversely affect our ability to retain personnel with stock incentives, to acquire businesses or assets in exchange for stock and/or to conduct future financing activities with or involving our common stock.

Customer demands and new regulations related to conflict-free minerals may force us to incur additional expenses.

The Dodd-Frank Wall Street Reform and Consumer Protection Act requires disclosure of use of “conflict” minerals mined from the Democratic Republic of Congo and adjoining countries and efforts to prevent the use of such minerals. In the semiconductor industry, these minerals are most commonly found in metals. As there may be only a limited number of suppliers offering “conflict free” metals, we cannot be sure that we will be able to obtain necessary metals in sufficient quantities or at competitive prices. Also, we may face challenges with our customers and suppliers if we are unable to sufficiently verify that the metals used in our products are “conflict free.”

Our Information Technology (“IT”) systems could be breached.

We face certain security threats relating to the confidentiality and integrity of our IT systems. Despite implementation of security measures, our IT systems may be vulnerable to damage from computer viruses, cyber attacks and other unauthorized access and these security breaches could result in a disruption to our operations. A material network breach of our IT systems could involve the theft of intellectual property or customer data which may be used by competitors. To the extent that any security breach results in a loss or damage to data, or inappropriate disclosure of confidential or proprietary information, it could cause damage to our reputation, affect our customer relations, lead to claims against us, increase our costs to protect against future damage and could result in a material adverse effect on our business and financial position.

Lapses in disclosure controls and procedures or internal control over financial reporting could materially and adversely affect our operations, profitability or reputation.

We are committed to maintaining high standards of internal control over financial reporting and disclosure controls and procedures. Nevertheless, lapses or deficiencies in disclosure controls and procedures or in our internal control over financial reporting may occur from time to time.

There can be no assurance that our disclosure controls and procedures will be effective in the future or that a material weakness or significant deficiency in internal control over financial reporting will not exist. Any such lapses or deficiencies may materially and adversely affect our business and results of operations or financial condition, restrict our ability to access the capital markets, require us to expend significant resources to correct the lapses or deficiencies, expose us to regulatory or legal proceedings, subject us to fines, penalties, judgments or losses not covered by insurance, harm our reputation, or otherwise cause a decline in investor confidence.



**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

17

---

**ITEM 2. PROPERTIES.****LITTELFUSE FACILITIES**

The company's operations are located in 48 owned or leased facilities worldwide, totaling approximately 2.3 million square feet. The company's corporate headquarters is located in the U.S. in Chicago, Illinois. The company has North American manufacturing facilities in Saskatoon, Canada, Winnipeg, Canada, Piedras Negras, Mexico, Melchor Muzquiz, Mexico, Matamoros, Mexico, Lake Mills, Wisconsin and Rapid City, South Dakota. The company has European manufacturing facilities in Roskilde, Denmark, Kaunas, Lithuania and Ozegna, Italy. Asia-Pacific operations include sales and distribution centers located in Singapore, Taiwan, Japan, China and Korea, with manufacturing plants located in various cities in China and the Philippines.

During 2015, the company began the transfer of its Lake Mills, Wisconsin manufacturing operations to the Philippines. This transfer is expected to be completed during 2016.

The company does not believe that it will encounter any difficulty in renewing its existing leases upon the expiration of their current terms. Management believes that the company's facilities are adequate to meet its requirements for the foreseeable future.

The following table provides certain information concerning the company's facilities at January 2, 2016, and the use of these facilities during fiscal year 2015:

<b><u>Location</u></b>	<b><u>Use</u></b>	<b><u>Size (sq. ft.)</u></b>	<b><u>Lease</u></b>		<b><u>Primary Product</u></b>
			<b><u>Lease/Own</u></b>	<b><u>Expiration Date</u></b>	
Chicago, Illinois	Administrative, Engineering, Research and Development and Testing	54,838	Leased	2024	Auto, Electronics and Industrial
Mount Prospect, Illinois	Engineering and Research and Development	23,515	Leased	2018	Auto and Electronics
Champaign, Illinois	Research and Development	13,503	Leased	2025	Auto, Electronics and Industrial
Lake Mills, Wisconsin	Manufacturing, Administrative, Engineering, Sales and Research and Development	65,000	Leased	2020	Auto and Electronics
San Jose, California	Engineering	960	Leased	2016	Electronics

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Troy, Michigan	Sales	2,224	Leased	2016	Auto
Rapid City, South Dakota	Manufacturing and Administrative	230,000	Owned	—	Industrial
Cicero, New York	Office	1,200	Leased	2017	Industrial
Boston, Massachusetts	Administrative, Engineering, Research and Development	26,000	Leased	2016	Auto
Melchor Muzquiz, Mexico	Manufacturing	39,364	Leased	2016	Auto
Bellingham, Washington	Office	2,000	Leased	2017	Auto
Piedras Negras, Mexico	Administrative, Manufacturing	99,822	Leased	2016	Auto
Piedras Negras, Mexico	Manufacturing	291,860	Owned	—	Auto and Industrial
Matamoros, Mexico	Administrative, Logistics, Manufacturing, Engineering, Testing and Distribution	106,000	Owned	—	Auto

<u>Location</u>	<u>Use</u>	<u>Size (sq. ft.)</u>	<u>Lease</u>		<u>Primary Product</u>
			<u>Lease/Owned</u>	<u>Expiration Date</u>	
Eagle Pass, Texas	Distribution	7,600	Leased	2016	Auto, Electronics and Industrial
Saskatoon, Canada	Administrative, Manufacturing, Engineering, Research and Development	88,585	Owned	—	Industrial
Calgary, Canada	Sales	240	Leased	2017	Industrial
Winnipeg, Canada	Administrative and Manufacturing	63,500	Leased	2018	Industrial
Sao Paulo, Brazil	Sales	3,229	Leased	2016	Electronics and Auto
Manaus, Brazil	Warehouse	2,152	Leased	2016	Electronics and Auto
Roskilde, Denmark	Administrative, Manufacturing, Research and Development and Sales	18,740	Leased	2016	Industrial
Swindon, U.K.	Administrative	304	Leased	2016	Electronics
Bremen, Germany	Administrative	13,455	Leased	2021	Auto, Electronics and Industrial
Norwich, U.K.	Engineering	7,964	Leased	2020	Auto
Essen, Germany	Leased to third party	37,244	Owned	—	—
Essen, Germany	Administrative	3,703	Leased	2017	Auto and Electronics
Amsterdam, Netherlands	Warehouse	21,851	Leased	2016	Auto and Electronics
Lauf, Germany	Administrative	127	Leased	2018	Auto
Lenzenburg, Switzerland	Administrative	215	Leased	2016	Auto, Electronics and Industrial
Arstad, Sweden	Sales	328	Leased	2016	Auto
Kaunas, Lithuania	Administrative, Manufacturing, Testing, Research and Development and Engineering	43,239	Owned	—	Auto
Kaunas, Lithuania	Manufacturing	62,862	Leased	2016	Auto
Kaunas, Lithuania	Research and Development	4,596	Leased	2017	Auto
Ozegna, Italy	Administrative, Manufacturing and Research and Development	32,292	Leased	2021	Auto
Singapore	Sales and Distribution	1,572	Leased	2018	Electronics
Taipei, Taiwan	Sales	7,876	Leased	2017	Electronics
Seoul, Korea	Sales	3,643	Leased	2016	Electronics
Lipa City, Philippines	Manufacturing	116,046	Owned	—	Electronics
Lipa City, Philippines	Manufacturing	105,827	Owned	—	Electronics
Dongguan, China	Manufacturing	264,792	Leased	2023	Electronics
Suzhou, China	Manufacturing	143,458	Owned	—	

Suzhou, China	Manufacturing	37,674	Leased	2016	Auto and Electronics
Beijing, China	Sales	452	Leased	2016	Auto and Electronics
Shanghai, China	Sales	6,324	Leased	2018	Electronics
Chu-Pei City, Taiwan	Research and Development	10,505	Leased	2019	Auto and Electronics
Wuxi, China	Manufacturing	221,214	Owned	—	Electronics
Hong Kong, China	Sales	743	Leased	2017	Auto, Electronics and Industrial
Yokohama, Japan	Sales	3,509	Leased	2017	Auto, Electronics and Industrial

Properties with lease expirations in 2016 may be renewed at various times throughout the year. The company does not anticipate any material impact as a result of such expirations.

**ITEM 3. LEGAL PROCEEDINGS.**

The company is not a party to any material legal proceedings, other than routine litigation incidental to our business.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Shares of the company's common stock are traded under the symbol "LFUS" on the NASDAQ Global Select Market. As of February 19, 2016, there were 81 holders of record of the company's common stock.

#### Stock Performance Graph

*The following stock performance graph and related information shall not be deemed "soliciting material" or "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filings under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that the company specifically incorporates it by reference into such filing.*

The following stock performance graph compares the five-year cumulative total return on Littelfuse common stock to the five-year cumulative total returns on the Russell 2000 Index and the Dow Jones Electrical Components and Equipment Industry Group Index. The company believes that the Russell 2000 Index and the Dow Jones Electrical Components and Equipment Industry Group Index represent a broad market index and peer industry group for total return performance comparison. The stock performance shown on the graph below represents historical stock performance and is not necessarily indicative of future stock price performance.

The Dow Jones Electrical Components and Equipment Industry Group Index includes the common stock of American Superconductor Corp.; Amphenol Corp.; Arrow Electronics, Inc.; Avnet, Inc.; AVX Corp.; Benchmark Electronics, Inc.; Capstone Turbine Corp.; CTS Corp.; General Cable Corp.; Hubbell Inc. Class B; Jabil Circuit, Inc.; KEMET Corp.; Littelfuse, Inc.; Methode Electronics, Inc.; Park Electrochemical Corp.; Plexus Corp.; Powerwave Technologies, Inc.; Regal-Beloit Corp.; Sanmina Corp.; Valence Technology, Inc.; Vicor Corp.; and Vishay Intertechnology, Inc.

In the case of the Russell 2000 Index and the Dow Jones Electrical Components and Equipment Industry Group Index, a \$100 investment made on December 31, 2010 and reinvestment of all dividends is assumed. In the case of the company, a \$100 investment made on December 31, 2010 is assumed. Returns for the company's fiscal years presented above are as of the last day of the respective fiscal year which was, December 31, 2011, December 29, 2012, December 28, 2013, December 27, 2014, and January 2, 2016 for the fiscal years 2011, 2012, 2013, 2014 and 2015, respectively.

The company expects that its practice of paying quarterly dividends on its common stock will continue although future dividend policy will be determined by the Board of Directors based upon its evaluation of earnings, cash availability and general business prospects. Currently, there are restrictions on the payment of dividends contained in the company's credit agreements that relate to the maintenance of certain financial ratios. However, the company expects to continue paying cash dividends on a quarterly basis for the foreseeable future.

The Board of Directors authorized the repurchase of up to 1,000,000 shares of the company's common stock under a program for the period May 1, 2015 to April 30, 2016. The company repurchased 350,000 shares of its common stock during the third quarter of 2015 and 650,000 shares remain available for purchase under the program as of January 2, 2016.

The company withheld 28,286 shares of stock in lieu of withholding taxes on behalf of employees who became vested in restricted share units during fiscal 2015 during the period April 25, 2014 to January 2, 2016. Shares withheld are classified as Treasury stock on the Consolidated Balance Sheet.

The table below provides information with respect to the company's quarterly stock prices and cash dividends declared and paid for each quarter during fiscal 2015 and 2014:

	<b>2015</b>				<b>2014</b>			
	<b>4Q</b>	<b>3Q</b>	<b>2Q</b>	<b>1Q</b>	<b>4Q</b>	<b>3Q</b>	<b>2Q</b>	<b>1Q</b>
High	\$114.90	\$97.96	\$102.78	\$103.08	\$100.82	\$97.45	\$99.46	\$97.54
Low	87.32	82.53	93.31	89.11	78.68	84.14	84.60	85.55



Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Close	107.01	89.09	97.76	98.36	98.76	87.65	93.20	91.20
Dividends	0.29	0.29	0.25	0.25	0.25	0.25	0.22	0.22

**ITEM 6. SELECTED FINANCIAL DATA.**

The information presented below provides selected financial data of the company during the past five fiscal years and should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and Notes to Consolidated Financial Statements set forth in Item 7 and Item 8, respectively, for the respective years presented (amounts in thousands, except per share data):

	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Net sales	\$867,864	\$851,995	\$757,853	\$667,913	\$664,955
Gross profit	330,499	324,428	296,232	258,467	256,694
Operating income	104,157	133,830	129,881	106,870	113,904
Net income	82,466	99,418	88,784	75,332	87,024
Per share of common stock:					
Income from continuing operations					
- Basic	3.65	4.41	3.98	3.45	3.96
- Diluted	3.63	4.37	3.94	3.40	3.90
Cash dividends paid	1.08	0.94	0.84	0.76	0.63
Cash and cash equivalents	328,786	297,571	305,192	235,404	164,016
Total assets	1,064,981	1,070,826	1,024,373	777,728	678,424
Short-term debt	87,000	88,500	126,000	84,000	85,000
Long-term debt, less current portion	84,474	106,658	93,750	—	—

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.****Littelfuse Overview****Introduction**

Littelfuse, Inc. and its subsidiaries (the "company" or "Littelfuse" or "we" or "our") is the worldwide leader in circuit protection offering the industry's broadest and deepest portfolio of circuit protection products and solutions. The company's devices protect products in virtually every market that uses electrical energy, from consumer electronics to automobiles to industrial equipment. The company conducts its business through three reportable segments, which are defined by markets and consist of Electronics, Automotive, and Industrial (formerly Electrical). The company's customer base includes original equipment manufacturers, tier one automotive suppliers and distributors.

In addition to protecting and growing its core circuit protection business, Littelfuse has been investing in power control and sensing technologies. These newer platforms, combined with the company's strong balance sheet and operating cash flow, provide opportunities for increased organic and acquisition growth. In 2012, the company set a

five-year strategic target plan to grow annual sales at 15% per year; 5% organically and 10% through acquisitions. As of January 2, 2016, three years into the five-year plan, the company has achieved an annual sales growth of 9%; 4% organically and 5% through acquisitions.

In November, 2015, the company announced its planned acquisition of TE Connectivity's circuit protection devices business ("CPD") which is expected to close by the end of the first quarter of 2016. The company believes that the pending acquisition of the CPD business in 2016 puts the company on track with the five-year growth targets set in 2012 as described above.

The company remains focused on only those acquisitions that will add shareholder value. Overall, the company believes its strategy is sound, the fundamentals of its business have not changed, and its long-term goals are achievable.

To maximize shareholder value, the company's primary strategic goals are to:

- Grow organically faster than its markets;
- Continue the pace of acquisitions;
- Sustain operating margins in the high teens;
- Improve return on investment; and
- Return excess cash to shareholders.

The company serves markets that are directly impacted by global economic trends with significant exposures to the consumer electronics, automotive, industrial and mining end markets. The company's results will be impacted positively or negatively by changes in these end markets.

### **Electronics Segment Overview**

The Electronics segment, which accounted for approximately 47% of total sales in 2015, has produced modest revenue growth and strong operating margins over the last few years. In 2015, sales decreased 1% (a 2% increase excluding currency effects) and operating margins were 19.0% for 2015 as compared to 21.2% in 2014. Strong sales in both Europe and China helped to offset continued adjustments in channel inventory and capacity constraints for electronic sensor products as the company continues to transfer production to the Philippines. The company believes the revenue growth is the result of a stable electronics market combined with ongoing design wins and market share gains for Littelfuse.

The electronics business is affected by seasonality. Sales are typically weaker in the first and fourth quarters and stronger in the second quarter and third quarters. This reflects the production ramp-up for consumer electronics in advance of the year-end holidays and other factors.

Fourth quarter 2015 sales for Electronics were consistent with normal seasonality as channel inventories remain at appropriate levels. The book-to-bill ratio of 1.00 at the end of the fourth quarter is also consistent with normal seasonal trends.

### **Automotive Segment Overview**

The Automotive segment, which accounted for approximately 39% of sales in 2015, has been the company's fastest growing business over the last few years. In 2015, Automotive sales increased 4% (11% excluding currency effects) primarily resulting from a strong performance in automotive sensor sales which increased 20% over the prior year.

Passenger car fuse sales continue to outperform global car production due primarily to the success of the company's new high current fuses which are driving increases in content per vehicle. Automotive sensors also had its third consecutive year of double-digit sales growth primarily reflecting ramp-up of new solar sensor and speed and position sensor platforms. The company continues to make good progress on its objective to improve sensor margins by growing the business and replacing low margin legacy business with more profitable design wins.

In summary, 2015 was a record year for the Automotive segment. Growth in fuse content was driven by more sophisticated electronics in vehicles and sales of our high-current products, especially the Masterfuse™ line. Our automotive sensor business had an excellent year, with strong growth in sales and a significant improvement in margins. For the CVP business, the main contributor to sales was the North American heavy duty truck market.

### **Industrial Segment Overview**

The Industrial segment, which accounted for approximately 14% of total sales in 2015, experienced an improved performance in 2015 with sales increasing 5% (9% excluding currency effects) over the prior year with strong sales in power fuses and continued improvement in the custom business more than offsetting a decline in relay sales. The increase in fuse sales was due to continuing strength in the solar market, as well as distributors increasing purchases after working down inventories in response to the weak end markets. Within the custom business, the company has diversified its portfolio beyond the potash market and into e-houses used in the heavy industrial and utility markets.

In summary, 2015 was a good year for the Industrial segment overall. The business saw a rebound in electrical fuse sales and margins, with fuse sales into the solar market almost doubling. It also made progress in diversifying the custom products and relay businesses beyond potash mining.

### **Business Acquisitions**

On October 1, 2015, the company acquired 100% of Sigmar S.r.l. (“Sigmar”) for \$5.4 million (net of cash acquired). Located in Ozegna, Italy, Sigmar is a leading global manufacturer of water-in-fuel and selective catalytic reduction (SCR) quality sensors, as well as diesel fuel heaters, solenoid valves and rotating oil filters for automotive and commercial vehicle applications. The acquisition further expands the company’s automotive sensor product line offerings within its Automotive business segment.

On January 3, 2014, the company acquired 100% of SymCom, Inc. (“SymCom”) for \$52.8 million (net of cash acquired). Located in Rapid City, South Dakota, SymCom provides overload relays and pump controllers primarily to the industrial market. The acquisition allows the company to strengthen its position in the relay products market by adding new products and new customers within its Industrial business segment.

### **Business Segment Information**

U.S. *Generally Accepted Accounting Principles* (“GAAP”) dictates annual and interim reporting standards for an enterprise's operating segments and related disclosures about its products, services, geographic areas and major customers. Within U.S. GAAP, an operating segment is defined as a component of an enterprise that engages in business activities from which it may earn revenues and incur expenses, and about which separate financial information is regularly evaluated by the Chief Operating Decision Maker (“CODM”) in deciding how to allocate resources. The CODM is the company’s President and Chief Executive Officer.

The following table is a summary of the company's business unit segments' net sales by business unit and geography (in millions):

<b>Business Unit</b>	<b>Fiscal Year</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>
Electronics <sup>(b)</sup>	\$405.5	\$410.1	\$367.1
Automotive <sup>(c)</sup>	340.0	325.4	267.2
Industrial <sup>(g)</sup>	122.4	116.5	123.6
Total	\$867.9	\$852.0	\$757.9

  

<b>Geography<sup>(a)</sup></b>			
Americas <sup>(d)(g)</sup>	\$401.2	\$377.7	\$342.4
Europe <sup>(e)</sup>	152.7	163.9	136.8
Asia-Pacific <sup>(f)</sup>	314.0	310.4	278.7
Total	\$867.9	\$852.0	\$757.9

(a) Sales by geography represent sales to customer or distributor locations.

(b) 2014 includes incremental Hamlin net sales of \$36.5 million.

(c) 2014 includes incremental Hamlin net sales of \$20.2 million.

(d) 2014 includes incremental Hamlin net sales of \$16.7 million.

(e) 2014 includes incremental Hamlin net sales of \$9.3 million.

(f) 2014 includes incremental Hamlin net sales of \$10.4 million.

(g) 2014 includes incremental SymCom net sales of \$19.6 million.

Business segment information is described more fully in Note 15 of the Notes to Consolidated Financial Statements. The following discussion provides an analysis of the information contained in the Consolidated Financial Statements and accompanying Notes to Consolidated Financial Statements at January 2, 2016 and December 27, 2014, and for the three fiscal years ended January 2, 2016, December 27, 2014 and December 28, 2013.

### **Results of Operations — 2015 compared with 2014**

The following table summarizes the company's consolidated results of operations for the periods presented. There were additional charges incurred during 2015. These included \$4.6 million in acquisition-related costs primarily related to the transaction and integration planning costs for the pending acquisition of TE Connectivity's circuit protection device business, \$5.2 million in charges related to the transfer of the company's reed switch manufacturing operations from its Lake Mills, Wisconsin and Suzhou, China locations to the Philippines, \$3.6 million in internal restructuring costs that will improve the company's worldwide legal structure and \$31.9 million in pension settlement and wind-up costs.



Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Fiscal year 2015 also included \$1.5 million in foreign currency gains primarily attributable to changes in the value of both the euro and Philippine peso against the U.S. dollar while fiscal year 2014 included \$3.9 million in foreign currency losses primarily related to the value of the Philippine peso against the dollar.

(In thousands)	Fiscal Year		% Change
	2015	2014	
Sales	\$867,864	\$851,995	2%
Gross profit	330,499	324,428	2%
Operating expenses	226,342	190,598	19%
Operating income	104,157	133,830	(22%)
Other expense (income), net	(5,417 )	(6,644 )	(18%)
Income before income taxes	106,948	131,646	(19%)
Net income	\$82,466	\$99,418	(17%)

Net sales increased \$15.9 million or 2% to \$867.9 million for fiscal year 2015 compared to \$852.0 million in fiscal year 2014 due primarily to strong growth in automotive products and improvement in the Industrial business segment partially offset by lower Electronics sales. The company also experienced \$38.9 million in unfavorable foreign currency effects in 2015 as compared to 2014 primarily resulting from sales denominated in the euro. Excluding currency effects, net sales increased \$54.7 million or 6% year-over-year. The Automotive business segment sales increased \$14.5 million or 4% to \$340.0 million. The Electronics business segment sales decreased \$4.6 million or 1% to \$405.5 million, and the Industrial business segment sales increased \$5.9 million or 5% to \$122.4 million. Sales levels in 2015, excluding currency effects, were positively impacted by increased demand for the company's automotive and industrial products partially offset by lower demand for the company's electronics products.

The increase in Automotive sales was primarily due to strong growth for automotive sensor products. Sales in the commercial vehicle market were up slightly year-over-year as continued strength in the heavy truck market was offset by general market weakness in construction, agriculture and the global mining industry. Automotive sales were negatively impacted by net unfavorable currency effects of \$22.4 million in 2015 as compared to 2014 primarily resulting from sales denominated in the euro. Excluding currency effects, Automotive sales increased \$37.0 million or 11% year-over-year.

The decrease in Electronics sales primarily resulted from net unfavorable currency effects of \$11.7 million for the full year 2015. Excluding currency effects, Electronics sales increased \$7.2 million or 2% year-over-year reflecting solid growth for passive components offset by lower sensor sales. Strong sales of electronic products in Europe and China helped to offset continued adjustments in channel inventory and capacity constraints for our electronic sensor products as the company continues to transfer production from the U.S. and China to the Philippines.

The increase in Industrial sales was primarily from higher custom and power fuse sales which were offset by lower relay sales. The Industrial segment experienced net unfavorable currency effects of \$4.7 million primarily from sales denominated in Canadian dollars and the euro. Excluding currency effects, Industrial sales increased \$10.6 million or 9% year over year. The increase in fuse sales is primarily due to continuing strength in the solar market, while higher custom product sales benefited from some recovery in the potash mining end market.

On a geographic basis, sales in the Americas increased \$23.5 million or 6% in 2015 as compared to 2014 due primarily to growth in all business segments offset by \$3.6 million in unfavorable currency effects resulting from sales denominated in Canadian dollars. Excluding currency effects, Americas' sales increased \$27.1 million or 7%. Automotive sales increased \$15.1 million or 9% primarily reflecting strong growth in the automotive sensor and passenger vehicle markets. Electronics sales increased \$3.2 million or 3% primarily reflecting higher demand for passive products. Industrial sales increased \$5.2 million or 5% resulting from increases in demand for power fuses and custom products.

European sales decreased \$11.3 million or 7% in 2015 compared to 2014 primarily due to net unfavorable currency effects of \$32.8 million primarily from sales denominated in the euro. Excluding currency effects, European sales increased \$21.5 million or 13% reflecting strong demand across all business segments. Automotive sales decreased \$6.9 million or 7% in 2015 reflecting net unfavorable currency effects. Excluding currency effects, Automotive sales increased \$14.2 million or 13% reflecting strong demand for automotive sensor products. Electronics sales decreased \$3.7 million or 7% reflecting the impact of net unfavorable currency effects. Excluding currency effects, Electronics sales increased \$6.6 million or 13% reflecting strong demand for semiconductor products. Industrial sales decreased \$0.7 million or 10% in 2015 primarily from the impact of net unfavorable currency effects. Excluding currency effects, Industrial sales increased \$0.7 million or 10%.

Asia-Pacific sales increased \$3.6 million or 1% in 2015 compared to 2014 primarily due to increased demand for Automotive and Industrial products offset by lower Electronics sales. Net unfavorable currency effects amounted to \$2.5 million. Excluding currency effects, Asia-Pacific sales increased \$6.1 million or 2%. Electronics sales decreased \$4.1 million or 2% reflecting weakness in the Taiwan, Japan and Korea markets. Automotive sales increased \$6.4 million or 11% reflecting continued increased demand for passenger vehicles in China as well as gains in market share. Industrial sales increased \$1.4 million or 19%.

Gross profit was \$330.5 million or 38.1% of sales in 2015, compared to \$324.4 million or 38.1% of sales in 2014. Gross profit for 2015 was negatively impacted by \$5.3 million of charges related to the transfer of the company's reed switch production from the U.S. and China to the Philippines. Gross profit for 2014 was negatively impacted by \$2.8 million for accounting adjustments related to the SymCom inventory which had been stepped up to fair value at the acquisition date as required by purchase accounting rules. Additionally, 2014 gross profit was negatively impacted by \$2.7 million in severance charges. These severance charges primarily related to post-Hamlin acquisition reorganization changes. Excluding the impact of these charges, gross profit was \$335.8 million or 38.7% of sales in 2015 as compared to \$329.9 million or 38.7% of sales in 2014.

Total operating expense was \$226.3 million or 26.1% of net sales for 2015 compared to \$190.6 million or 22.4% of net sales for 2014. Operating expense in 2015 included \$39.9 million of charges primarily related to pension settlement and wind-up costs of \$31.9 million and restructuring and acquisition costs of \$8.0 million. Operating expense in 2014 included \$3.5 million in restructuring, acquisition and impairment costs, \$2.2 million of which was to effect changes in the company's legal structure to allow tax-efficient repatriation of cash. Excluding these charges, total operating expense was \$186.4 million or 21.5% of net sales for 2015 compared to \$187.1 million or 22.0% of net sales in 2014.

Operating income was \$104.2 million or 12.0% of net sales in 2015 compared to \$133.8 million or 15.7% of net sales in the prior year. The decrease in operating income in the current year was due primarily to the factors affecting operating expenses discussed above.

Interest expense was \$4.1 million in 2015 as compared to \$4.9 million in 2014 and is primarily related to the company's increased borrowing to fund acquisitions. The lower interest expense in 2015 resulted from lower average debt balances as compared to the prior year.

Foreign exchange (gain) loss was \$1.5 million of gain in 2015 compared to \$3.9 million of loss in 2014. The fluctuation in foreign exchange was primarily attributable to changes in the value of both the euro and the Philippine peso against the U.S. dollar in 2015 and 2014.

Other expense (income), net, consisting of interest income, royalties and non-operating income was \$5.4 million of income in 2015 compared to \$6.6 million of income in 2014. The year-over-year decrease in income primarily reflects lower interest income in 2015.

Income before income taxes was \$106.9 million in 2015 compared to \$131.6 million in 2014. Income tax expense was \$24.5 million in 2015 compared to \$32.2 million in 2014. The 2015 effective income tax rate was 22.9% compared to 24.5% in 2014. The lower effective tax rate in 2015 is primarily related to more income earned in low-tax jurisdictions in 2015 as compared to 2014. The effective tax rates are lower than the U.S. statutory tax rate primarily as a result of income earned in low-tax jurisdictions.

**Results of Operations — 2014 compared with 2013**

The following table summarizes the company's consolidated results of operations for the periods presented. The results include incremental activity from the company's business acquisitions as described, where applicable, in the below analysis. There were also additional charges and accounting adjustments during 2014. These include a \$2.8 million inventory adjustment in 2014 related to the SymCom acquisition as described in Note 2, \$0.4 million in acquisition-related costs, \$3.2 million in severance charges related to the Lake Mills, Wisconsin and Matamoros, Mexico locations, \$2.2 million in internal legal restructuring costs that will improve the company's worldwide legal structure and \$0.3 million in asset impairments.

Fiscal year 2014 also included \$3.9 million in foreign currency losses primarily attributable to changes in the value of both the euro and Philippine peso against the U.S. dollar while fiscal year 2013 included \$3.3 million in foreign currency gains primarily related to the value of the Philippine peso against the U.S. dollar.

(In thousands)	Fiscal Year		% Change	
	2014	2013		
Sales	\$851,995	\$757,853	12	%
Gross profit	324,428	296,232	10	%
Operating expenses	190,598	166,351	15	%
Operating income	133,830	129,881	3	%
Other expense (income), net	(6,644 )	(4,646 )	43	%
Income before income taxes	131,646	124,235	6	%
Net income	\$99,418	\$88,784	12	%

Net sales increased \$94.1 million or 12% to \$852.0 million for fiscal year 2014 compared to \$757.9 million in fiscal year 2013 due primarily to an incremental \$56.1 million from business acquisitions and growth in electronic and automotive products, offset by lower Industrial sales. The company also experienced \$0.4 million in unfavorable foreign currency effects in 2014 as compared to 2013 primarily resulting from sales denominated in Canadian dollars and Japanese yen. During the fourth quarter of 2014, sales were negatively impacted by the steep decline in the euro. Excluding acquisitions and currency effects, net sales increased \$38.5 million or 5% year over year. The Automotive business segment sales increased \$58.2 million or 22% to \$325.4 million. The Electronics business segment sales increased \$43.0 million or 12% to \$410.1 million, and the Industrial business segment sales decreased \$7.1 million or 6% to \$116.5 million. Sales levels in 2014, excluding acquisitions and currency effects, were positively impacted by increased demand for the company's automotive and electronic products partially offset by slowing demand for the company's industrial products.

The increase in Automotive sales was primarily due to strong organic growth in all product categories and an incremental \$20.2 million in sales from Hamlin. Currency effects increased sales by \$0.6 million for the full year 2014

compared to 2013. Excluding incremental sales from Hamlin and currency effects, Automotive sales increased \$37.3 million or 14% year over year due primarily to increases in content per vehicle and strength in the heavy truck market.

The increase in Electronics sales reflected solid growth for both semiconductor and passive components and incremental sales from Hamlin of \$16.3 million. In addition, sales were positively impacted by net favorable currency effects of \$0.2 million for the full year 2014. Excluding acquisitions and currency effects, Electronics sales increased \$26.5 million or 7% year over year.

The decrease in Industrial sales was primarily from declines in custom and relay sales into the mining market and power fuses into the solar market. These declines more than offset incremental sales of \$19.6 million from the SymCom acquisition in 2014. The Industrial segment experienced net unfavorable currency effects of \$1.3 million primarily from sales denominated in Canadian dollars. Excluding incremental sales and currency effects, Industrial sales decreased \$25.4 million or 21% year over year.

On a geographic basis, sales in the Americas increased \$35.3 million or 10% in 2014 as compared to 2013 due primarily to incremental sales from business acquisitions of \$36.3 million offset by \$1.4 million in unfavorable currency effects resulting from sales denominated in Canadian dollars. Excluding acquisitions and currency effects, Americas' sales increased \$0.4 million or less than 1%. Increases in the company's Automotive and Electronics sales were mostly offset by a decline in Industrial sales. Automotive sales increased \$33.4 million or 26% primarily reflecting incremental sales from acquisitions of \$12.5 million, strong growth in the passenger vehicle market and growth in the commercial vehicle market. Electronics sales increased \$9.6 million or 9% primarily reflecting higher demand and incremental sales from Hamlin of \$4.3 million. Industrial sales decreased \$7.7 million or 7% resulting from decreases in demand for protection relays and custom products due to continued weakness in the mining segment. This decrease more than offset \$19.6 million in incremental sales from SymCom in 2014.

European sales increased \$27.1 million or 20% in 2014 compared to 2013 primarily due to strong demand for electronics and automotive products, incremental sales from Hamlin of \$9.4 million and \$1.0 million in favorable currency effects from sales denominated in euros. Excluding acquisitions and currency effects, European sales increased \$16.8 million or 12%. This resulted from increases in the company's Electronics and Automotive sales partially offset by a decrease in Industrial sales. Automotive sales increased \$18.2 million or 21% in 2014 primarily reflecting incremental sales from Hamlin sensors of \$6.2 million and higher sales in the passenger vehicle markets driven primarily by increased content. Excluding the impact of incremental sales from Hamlin and favorable currency effects, Automotive sales increased \$11.5 million or 13%. Electronics sales increased \$9.2 million or 22% reflecting incremental sales from Hamlin of \$3.2 million and higher demand in 2014. Industrial sales decreased \$0.3 million or 4% in 2014 primarily from decreased demand in the marine market for relays.

Asia-Pacific sales increased \$31.7 million or 11% in 2014 compared to 2013 primarily due to increased demand across all product categories and incremental sales from Hamlin of \$10.4 million. Currency effects amounted to less than \$0.1 million. Excluding acquisitions and currency effects, Asia-Pacific sales increased \$21.3 million or 8%. Electronics sales increased \$24.2 million or 11% reflecting incremental sales from Hamlin of \$8.9 million and increased sales in China offset by weakness in the Taiwan, Japan and Korea markets. Automotive sales increased \$6.6 million or 12% reflecting incremental sales from acquisitions of \$1.5 million and continued increased demand for passenger vehicles in China as well as gains in market share.

Gross profit was \$324.4 million or 38.1% of sales in 2014, compared to \$296.2 million or 39.1% of sales in 2013. Gross profit in both 2014 and 2013 were negatively impacted by purchase accounting adjustments in cost of sales of \$2.8 million and \$1.5 million, respectively. These charges were the additional cost of goods sold for SymCom and Hamlin inventories which had been stepped up to fair value at the acquisition dates as required by purchase



accounting rules. Additionally, 2014 gross profit was negatively impacted by \$2.7 million in severance charges. These severance charges primarily related to post-Hamlin acquisition reorganization changes. Excluding the impact of these charges, gross profit was \$329.9 million or 38.7% of sales as compared to \$297.8 million or 39.3% of sales in 2013. The decrease in gross margin was primarily attributable to higher sales of sensors in 2014 which carry lower margins than the company's core products.

Total operating expense was \$190.6 million or 22.4% of net sales for 2014 compared to \$166.4 million or 22.0% of net sales for 2013. The increase in operating expenses primarily reflects incremental operating expenses of \$14.2 million from business acquisitions and \$3.5 million in restructuring, acquisition and impairment costs, \$2.2 million of which was to effect changes in the company's legal structure to allow tax-efficient repatriation of approximately \$90.0 million of cash in the fourth quarter of 2014.

Operating income was \$133.8 million or 15.7% of net sales in 2014 compared to \$129.9 million or 17.1% of net sales in the prior year. The increase in operating income and decrease in operating margin in the current year was due primarily to the factors affecting gross profit and operating expenses discussed above.

Interest expense was \$4.9 million in 2014 as compared to \$2.9 million in 2013 and is primarily related to the company's increased borrowing to fund acquisitions.

Impairment and equity in net loss of unconsolidated affiliate was \$10.7 million in 2013. During the first quarter of 2013, the company fully impaired its investment in and loan receivable from Shocking Technologies, Inc. ("Shocking") as described in Note 6 of the Notes to Consolidated Financial Statements included in this report.

Foreign exchange (gain) loss was \$3.9 million of loss in 2014 compared to \$3.3 million of gain in 2013. The fluctuation in foreign exchange was primarily attributable to changes in the value of both the euro and the Philippine peso against the U.S. dollar in 2014 and the Philippine peso against the dollar in 2013.

Other expense (income), net, consisting of interest income, royalties and non-operating income was \$6.6 million of income in 2014 compared to \$4.6 million of income in 2013. The year-over-year increase in income primarily reflects higher interest income in 2014.

Income before income taxes was \$131.6 million in 2014 compared to \$124.2 million in 2013. Income tax expense was \$32.2 million in 2014 compared to \$35.5 million in 2013. The 2014 effective income tax rate was 24.5% compared to 28.5% in 2013. The lower effective tax rate in 2014 is primarily related to the \$6.1 million Shocking tax adjustment booked in 2013. The 2014 and 2013 effective tax rates are lower than the U.S. statutory tax rate primarily the result of income earned in low-tax jurisdictions.

## **Liquidity and Capital Resources**

As of January 2, 2016, \$318.5 million of the \$328.8 million of the company's cash and cash equivalents was held by foreign subsidiaries. Of the \$318.5 million held by foreign subsidiaries, approximately \$24.6 million could be repatriated with minimal tax consequences. The company expects to maintain its foreign cash balances (other than the aforementioned \$24.6 million) for local operating requirements, to provide funds for future capital expenditures and for potential acquisitions. The company does not expect to repatriate these funds to the U.S.

The company historically has financed capital expenditures through cash flows from operations. Management expects that cash flows from operations and available lines of credit will be sufficient to support both the company's operations and its debt obligations for the foreseeable future.

### *Term Loan and Revolving Credit Facilities*

On May 31, 2013, the company entered into a new credit agreement with J.P. Morgan Securities LLC for up to \$325.0 million which consists of an unsecured revolving credit facility of \$225.0 million and an unsecured term loan of \$100.0 million. The new credit agreement is for a five year period. At January 2, 2016, the company had available \$197.9 million of borrowing capacity under the credit agreement at an interest rate of LIBOR plus 1.25%, or a total interest rate of 1.68% as of January 2, 2016.

The credit agreement replaced the company's previous credit agreement dated June 13, 2011, which was terminated on May 31, 2013.

On January 30, 2014, the company increased the unsecured revolving credit facility entered into on May 31, 2013, by \$50.0 million thereby increasing the total revolver borrowing capacity from \$225.0 million to \$275.0 million.

This arrangement contains covenants that, among other matters, impose limitations on the incurrence of additional indebtedness, future mergers, sales of assets, payment of dividends, and changes in control, as defined in the agreement. In addition, the company is required to satisfy certain financial covenants and tests relating to, among other matters, interest coverage and leverage. At January 2, 2016, the company was in compliance with all covenants under the credit agreement.

### *Entrusted Loan*

During the fourth quarter of 2014, the company entered into an entrusted loan arrangement ("Entrusted Loan") of RMB 110.0 million (approximately \$17.9 million) between two of its China legal entities, Littelfuse Semiconductor (Wuxi) Company (the "*Lender*") and Suzhou Littelfuse OVS Ltd. (the "*Borrower*"), utilizing Bank of America, N.A., Shanghai Branch as agent. Direct borrowing and lending between two commonly owned commercial entities was strictly forbidden at the time under China's regulations requiring the use of a third party agent to enable loans between Chinese legal entities. As a result, the Entrusted Loan is reflected as both a long-term asset and long-term debt on the company's Consolidated Balance Sheets and is reflected in the investing and financing activities in its Consolidated Statements of Cash Flows. Interest expense and interest income will be recorded between the lender and borrower with no net impact on the company's Consolidated Statements of Income since the amounts will be offsetting. The loan interest rate per annum is 5.25%. The Entrusted Loan is used to finance the operation and working capital needs of the borrower and matures in November 2019. The balance of the Entrusted Loan was RMB 61.5 million (approximately \$9.5 million) at January 2, 2016.

*Other Obligations*

For the fiscal year ended January 2, 2016, the company had \$0.1 million available in letters of credit. No amounts were drawn under these letters of credit at January 2, 2016.

*Cash Flows and Working Capital*

The company started 2015 with \$297.6 million of cash. Net cash provided by operating activities in 2015 was approximately \$165.8 million and included \$82.5 million in net income, \$82.1 million in non-cash adjustments (primarily \$41.6 million in depreciation and amortization) and \$1.2 million of favorable changes in operating assets and liabilities.

Changes in operating assets and liabilities (including short-term and long-term items) that negatively impacted cash flows in 2015 consisted of changes in accounts receivable (\$14.4 million), inventory (\$3.6 million) and accrued taxes (\$1.0 million). Increases in accounts receivable and inventory resulted from higher sales volumes in 2015. Positively impacting cash flows were changes in accrued expenses including post-retirement (\$6.5 million), accounts payable (\$2.6 million), accrued payroll and severance (\$5.9 million) and prepaid expenses and other (\$5.2 million).

Net cash used in investing activities in 2015 was approximately \$44.2 million and included \$44.0 million in purchases of property, plant and equipment (primarily production equipment and facilities for capacity expansion and new products at the company's locations in Piedras Negras, Mexico, Wuxi, China and the Philippines), \$3.5 million for the purchase of an investment and \$4.6 million for a business acquisition. Offsetting the cash used in investing activities was a \$7.8 million decrease in the Entrusted Loan receivable (see Note 7 of the Notes to Consolidated Financial Statements included in this report) and \$0.1 million in proceeds from sales of property, plant and equipment.

Net cash used in financing activities in 2015 was approximately \$67.7 million, which included \$23.1 million in net payments of debt, \$1.9 million in excess tax benefits on share-based compensation and \$9.2 million in cash proceeds from the exercise of stock options. The company also repurchased \$31.3 million of its own stock in 2015. Additionally the company paid cash dividends of \$24.3 million during the year. Information regarding the company's debt is provided in Note 7 of the Notes to Consolidated Financial Statements included in this report.

The effect of exchange rate changes decreased cash by \$22.8 million in 2015. The net cash provided by operating activities less net cash used in financing and provided by investing activities plus the effect of exchange rate changes, resulted in a \$31.2 million increase in cash and cash equivalents in 2015. This left the company with a cash balance of \$328.8 million at January 2, 2016.

Days sales outstanding (DSO) in accounts receivable was 59 days at year-end 2015 compared to 60 days at year-end 2014 and 59 days at year-end 2013. Days inventory outstanding was 65 days at year-end 2015, compared to 68 days at year-end 2014 and 70 days at year-end 2013.

The ratio of current assets to current liabilities was 2.8 to 1 at year-end 2015, compared to 2.7 to 1 at year-end 2014 and 2.7 to 1 at year-end 2013. The change in the current ratio at the end of 2015 compared to the prior year reflected increased current assets in 2015, primarily related to higher cash balances. The carrying amounts of total debt decreased \$23.1 million in 2015, compared to a decrease of \$24.6 million in 2014 and an increase of \$135.8 million in 2013. The decrease in 2015 was due to higher net payments under the revolving credit facility in 2015. The ratio of long-term debt to equity was 0.11 to 1 at year-end 2015 compared to 0.15 to 1 at year-end 2014 and 0.14 to 1 at year-end 2013. Further information regarding the company's debt is provided in Note 7 of the Notes to Consolidated Financial Statements included in this report.

The company started 2014 with \$305.2 million of cash. Net cash provided by operating activities in 2014 was approximately \$153.1 million and included \$99.4 million in net income and \$47.8 million in non-cash adjustments (primarily \$41.9 million in depreciation and amortization), and \$5.9 million of favorable changes in operating assets and liabilities.

Changes in operating assets and liabilities (including short-term and long-term items) that negatively impacted cash flows in 2014 consisted of changes in accounts receivable (\$13.1 million), inventory (\$2.3 million), accrued expenses including post-retirement (\$1.6 million) and accrued taxes (\$0.5 million). Increases in accounts receivable and inventory resulted from higher sales volumes in 2014. Accrued expenses including post-retirement included pension contributions of \$9.9 million in 2014 and \$5.0 million in 2013. Positively impacting cash flows were changes in accounts payable (\$17.3 million), accrued payroll and severance (\$2.4 million) and prepaid expenses and other (\$3.7 million). The increase in accounts payable primarily resulted from large capital purchases in December 2014 and the lengthening of vendor payment terms.

The company's capital expenditures were \$44.0 million in 2015, \$32.3 million in 2014 and \$35.0 million in 2013.

The company's Board of Directors authorized the repurchase of up to 1,000,000 shares of the company's common stock under a program for the period May 1, 2015 to April 30, 2016. The company repurchased 350,000 shares of its common stock during 2015 under this program and 650,000 shares may yet be purchased under the program as of January 2, 2016. The company withheld 28,286 shares of stock in lieu of withholding taxes on behalf of employees who became vested in restricted stock option grants during 2015.

### Contractual Obligations and Commitments

The following table summarizes contractual obligations and commitments as of January 2, 2016:

(In thousands )	Total	< 1 Year	> 1 - < 3 Years	> 3 - < 5 Years	> 5 Years
Term loan	\$85,000	\$10,000	\$75,000	\$—	\$—
Revolving credit facility	77,000	77,000	—	—	—
Entrusted loan	9,474	—	—	9,474	—
Interest payments	3,098	1,365	1,733	—	—
Supplemental Executive Retirement Plan	2,461	31	1,880	63	487
Operating lease payments	34,639	8,886	9,211	6,521	10,021
Purchase obligations	51,658	51,658	—	—	—
Total	\$263,330	\$148,940	\$87,824	\$16,058	\$10,508

### Off-Balance Sheet Arrangements

As of January 2, 2016, the company did not have any off-balance sheet arrangements, as defined under SEC rules. Specifically, the company was not liable for guarantees of indebtedness owed by third parties, the company was not directly liable for the debt of any unconsolidated entity and the company did not have any retained or contingent interest in assets. The company does not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

### Recent Accounting Pronouncements



In November 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-17 – Income taxes (Topic 740): Balance Sheet Classification of Deferred Taxes which amends the presentation of deferred income tax liabilities and assets to be classified as noncurrent in a classified statement of financial position. The amendments in the ASU are effective for financial statements issued for annual periods beginning after December 15, 2016. The company has adopted the new standard on January 2, 2016 and has restated the presentation of deferred income taxes on its comparative Consolidated Balance Sheets as of December 27, 2014 to reflect the change.

In May 2014, the FASB amended prior authoritative guidance for revenue recognition which provides a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most current revenue recognition guidance. The standard is effective for public entities for annual and interim periods beginning after December 15, 2016. Early adoption is not permitted. The guidance permits two implementation approaches, one requiring retrospective application of the new standard with restatement of prior years and one requiring prospective application of the new standard with disclosure of results under old standards. The company is currently evaluating the impact of the adoption of this accounting standard on its consolidated financial statements.

### **Critical Accounting Policies and Estimates**

Certain of the accounting policies as discussed below require the application of significant judgment by management in selecting the appropriate estimates and assumptions for calculating amounts to record in the financial statements. Actual results could differ from those estimates and assumptions, impacting the reported results of operations and financial position. Significant accounting policies are more fully described in the Notes to Consolidated Financial Statements included elsewhere in this Annual Report. Certain accounting policies, however, are considered to be critical in that they are most important to the depiction of the company's financial condition and results of operations and their application requires management's subjective judgment in making estimates about the effect of matters that are inherently uncertain. The company believes the following accounting policies are the most critical to aid in fully understanding and evaluating its reported financial results, as they require management's most difficult, subjective or complex judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain. The company has reviewed these critical accounting policies and related disclosures with the Audit Committee of its Board of Directors.

#### Net Sales

*Revenue Recognition:* The company recognizes revenue on product sales in the period in which the sales process is complete. This generally occurs when persuasive evidence of an arrangement exists, products are shipped (FOB origin) to the customer in accordance with the terms of the sale, the risk of loss has been transferred, collectability is reasonably assured and the pricing is fixed and determinable. At the end of each period, for those shipments where title to the products and the risk of loss and rewards of ownership do not transfer until the product has been received by the customer, the company adjusts revenues and cost of sales for the delay between the time that the products are shipped and when they are received by the customer. The company's distribution channels are primarily through direct sales and independent third party distributors.

*Revenue and Billing:* The company accepts orders from customers based on long term purchasing contracts and written sales agreements. Contract pricing and selling agreement terms are based on market factors, costs and competition. Pricing normally is negotiated as an adjustment (premium or discount) from the company's published

price lists. The customer is invoiced when the company's products are shipped to them in accordance with the terms of the sales agreement.

*Returns and Credits:* Some of the terms of the company's sales agreements and normal business conditions provide customers (distributors) the ability to receive price adjustments on products previously shipped and invoiced. This practice is common in the industry and is referred to as a "ship and debit" program. This program allows the distributor to debit the company for the difference between the distributors' contracted price and a lower price for specific transactions. Under certain circumstances (usually in a competitive situation or large volume opportunity), a distributor will request authorization to reduce its price to its buyer. If the company approves such a reduction, the distributor is authorized to "debit" its account for the difference between the contracted price and the lower approved price. The company establishes reserves for this program based on historic activity and actual authorizations for the debit and recognizes these debits as a reduction of revenue.

*Return to Stock:* The company has a return to stock policy whereby a customer with previous authorization from Littelfuse management can return previously purchased goods for full or partial credit. The company establishes an estimated allowance for these returns based on historic activity. Sales revenue and cost of sales are reduced to anticipate estimated returns.

*Volume Rebates:* The company offers incentives to certain customers to achieve specific quarterly or annual sales targets. If customers achieve their sales targets, they are entitled to rebates. The company estimates the future cost of these rebates and recognizes this estimated cost as a reduction to revenue as products are sold.

*Allowance for Doubtful Accounts:* The company evaluates the collectability of its trade receivables based on a combination of factors. The company regularly analyzes its significant customer accounts and, when the company becomes aware of a specific customer's inability to meet its financial obligations, the company records a specific reserve for bad debt to reduce the related receivable to the amount the company reasonably believes is collectible. The company also records allowances for all other customers based on a variety of factors including the length of time the receivables are past due, the financial health of the customer, macroeconomic considerations and past experience. Historically, the allowance for doubtful accounts has been adequate to cover bad debts. If circumstances related to specific customers change, the estimates of the recoverability of receivables could be further adjusted.

### Inventory

The company performs regular detailed assessments of inventory, which include a review of, among other factors, demand requirements, product life cycle and development plans, component cost trends, product pricing, shelf life and quality issues. Based on the analysis, the company records adjustments to inventory for excess quantities, obsolescence or impairment when appropriate to reflect inventory at net realizable value. Historically, inventory reserves have been adequate to reflect inventory at net realizable values. During 2014, the company was required to step up the value of inventory acquired in business combinations to its selling prices less the cost to sell under business combination accounting. This step-up was approximately \$2.8 million for SymCom in 2014.

### Goodwill and Other Intangible Assets

The company annually tests goodwill for impairment on the first day of its fiscal fourth quarter or at an interim date if there is an event or change in circumstances that indicates the asset may be impaired. The company has eight reporting units for goodwill testing purposes. Management determines the fair value of each of its reporting units by using a discounted cash flow model (which includes forecasted five-year income statement and working capital

projections, a market-based weighted average cost of capital and terminal values after five years) to estimate market value. In addition, the company compares its derived enterprise value on a consolidated basis to the company's market capitalization as of its test date to ensure its derived value approximates the market value of the company when taken as a whole.

As of the most recent annual test conducted on September 27, 2015, the company concluded the fair value of each of the reporting units exceeded its carrying value of invested capital and therefore, no potential goodwill impairment existed. Specifically, the company noted that its headroom, defined as the excess of fair value over the carrying value of invested capital, was 148%, 95%, 188%, 218%, 76%, 26%, 12% and 198% for its reporting units; electronics (non-silicon), electronics (silicon), passenger car, commercial vehicle products, sensors, relays, custom products and power fuse, respectively, at September 27, 2015.

Certain key assumptions used in the annual test included a discount rate of 11.7% and a long-term growth rate of 3.0% which were used for all reporting units except for automotive sensor and relay which had a discount rate of 13.7% as a result of a 2.0% premium factor and custom products which had a discount rate of 14.7% as a result of a 3.0% premium factor.

In addition, the company performed a sensitivity test at September 27, 2015 that showed either a 100 basis point increase in its discount rate or a 100 basis point decrease in the long-term growth rate for each reporting unit would not have changed the company's conclusion that no potential goodwill impairment existed at September 27, 2015.

The company will continue to perform a goodwill impairment test as required on an annual basis and on an interim basis, if certain conditions exist. Factors the company considers important, which could result in changes to its estimates, include underperformance relative to historical or projected future operating results and declines in acquisitions and trading multiples. Due to the diverse end user base and non-discretionary product demand, the company does not believe its future operating results will vary significantly relative to its historical and projected future operating results.

#### Long-Lived Assets

The company evaluates long-lived asset groups on an ongoing basis. Long-lived asset groups are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the related asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the asset to future undiscounted cash flows expected to be generated by the asset group. If it is determined to be impaired, the impairment recognized is measured by the amount by which the carrying value of the asset exceeds its fair value. The company's estimates of future cash flows from such assets could be impacted if it underperforms relative to historical or projected future operating results. The company recorded asset impairment charges of \$0.0 million, \$0.3 million and \$0.0 million for the fiscal years ended 2015, 2014 and 2013, respectively. Further information regarding asset impairments is provided in Note 11 of the Notes to Consolidated Financial Statements included in this report.

#### Environmental Liabilities

Environmental liabilities are accrued based on estimates of the probability of potential future environmental exposure. Costs related to on-going maintenance of environmental sites are expensed as incurred. If actual or estimated probable future losses exceed the company's recorded liability for such claims, it would record additional charges as other expense during the period in which the actual loss or change in estimate occurred. The company evaluates its reserve for coal mine remediation annually utilizing a third party expert.

### Pension and Supplemental Executive Retirement Plan

Littelfuse has a number of company-sponsored defined benefit plans primarily in Europe and the Asia-Pacific region. The company recognizes the full unfunded status of these plans on the balance sheet. Actuarial gains and losses and prior service costs and credits are recognized as a component of accumulated other comprehensive income. Accounting for pensions requires estimating the future benefit cost and recognizing the cost over the employee's expected period of employment with the company. Certain assumptions are required in the calculation of pension costs and obligations. These assumptions include the discount rate, salary scales and the expected long-term rate of return on plan assets. The discount rate is intended to represent the rate at which pension benefit obligations could be settled by purchase of an annuity contract. These assumptions are subject to change based on stock and bond market returns and other economic factors. Actual results that differ from the company's assumptions are accumulated and amortized over future periods and, therefore, generally affect its recognized expense and accrued liability in such future periods. While the company believes that its assumptions are appropriate given current economic conditions and its actual experience, significant differences in results or significant changes in the company's assumptions may materially affect its pension obligations and related future expense. During 2015, the company settled its U.S. defined benefit pension plan as described in Note 12 of the Notes to Consolidated Financial Statements included in this report. Further information regarding these plans is also provided in Note 12 of the Notes to Consolidated Financial Statements included in this report.

### Equity-based Compensation

Equity-based compensation expense is recorded for stock-option awards and restricted share units based upon the fair values of the awards. The fair value of stock-option awards is estimated at the grant date using the Black-Scholes option pricing model, which includes assumptions for volatility, expected term, risk-free interest rate and dividend yield. Expected volatility is based on implied volatilities from traded options on Littelfuse stock, historical volatility of Littelfuse stock and other factors. Historical data is used to estimate employee termination experience and the expected term of the options. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. The company initiated a quarterly cash dividend in 2010 and expects to continue making cash dividend payments in the foreseeable future.

Total equity-based compensation expense for all equity compensation plans was \$10.7 million, \$9.4 million, and \$8.9 million in 2015, 2014, and 2013, respectively. Further information regarding this expense is provided in Note 13 of the Notes to Consolidated Financial Statements included in this report.

### Income Taxes



The company accounts for income taxes using the liability method. Deferred taxes are recognized for the future effects of temporary differences between financial and income tax reporting using tax rates in effect for the years in which the differences are expected to reverse. The company recognizes deferred taxes for temporary differences, operating loss carryforwards and tax credit carryforwards. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Federal and state income taxes are provided on the portion of foreign income that is expected to be remitted to the U.S. and be taxable.

The company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement.

Further information regarding income taxes, including a detailed reconciliation of current year activity, is provided in Note 14 of the Notes to Consolidated Financial Statements included in this report.

## Outlook

Sales for the first quarter of 2016 are expected to be in the range of \$213.0 to \$223.0 million which represents 4% revenue growth over the prior quarter at the midpoint of the range (approximately 6% growth excluding currency effects). Despite concerns about the global economy and weakness in some of its end markets, the company believes it can grow revenue in the low to mid single digits in 2016. Assuming modest top-line growth, the company believes it can expand its operating margin by approximately 150 basis points compared to 2015 as it benefits from completion of its footprint consolidation projects, further progress on automotive sensor profitability initiatives and continued gains in manufacturing performance.

The company expects capital expenditures in 2016 to be in the range of \$40 to \$45 million, primarily for capacity to support volume increases, new product introductions and restructuring activities. The company expects to fund 2016 capital expenditures from operating cash flows.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The company is exposed to market risk from changes in interest rates, foreign exchange rates and commodity prices.

### *Interest Rates*

The company had \$162.0 million in debt outstanding at January 2, 2016 related to the unsecured revolving credit facility and term loan which are described in Item 7 under *Liquidity and Capital Resources*. While this debt has a variable interest rate of LIBOR plus 1.25%, the company's interest expense is not materially sensitive to changes in interest rate levels since debt levels and potential interest expense increases are insignificant relative to earnings.

### *Foreign Exchange Rates*

The majority of the company's operations consist of manufacturing and sales activities in foreign countries. The company has manufacturing facilities in the U.S., Mexico, Canada, Denmark, China, Italy, Lithuania and the Philippines. During 2015, sales to customers outside the U.S. were approximately 60% of total net sales. Substantially all sales in Europe are denominated in euros and substantially all sales in the Asia-Pacific region are denominated in U.S. dollars, Japanese yen, Korean won, Chinese yuan and Taiwanese dollars.

The company's foreign exchange exposures result primarily from sale of products in foreign currencies, foreign currency denominated purchases, employee-related and other costs of running operations in foreign countries and translation of balance sheet accounts denominated in foreign currencies. The company's most significant net long exposure is to the euro. The company's most significant net short exposures are to the Chinese yuan, Mexican peso and Philippine peso. Changes in foreign exchange rates could affect the company's sales, costs, balance sheet values and earnings. The company uses netting and offsetting intercompany account management techniques to reduce known foreign currency exposures where possible and also, from time to time, utilizes derivative instruments to hedge certain foreign currency exposures deemed to be material.

*Commodity Prices*

The company uses various metals in the manufacturing of its products, including copper, zinc, tin, gold and silver. Prices of these commodities can and do fluctuate significantly, which can impact the company's earnings. The most significant of these exposures is to copper, zinc, gold and silver, where at current prices and volumes, a 10% price change would affect annual pre-tax profit by approximately \$1.6 million for copper, \$0.6 million for zinc, \$0.2 million for gold and \$0.6 million for silver.

The cost of oil has fluctuated dramatically over the past several years. Consequently, there is a risk that a return to high prices for oil and electricity in 2016 could have a significant impact on the company's transportation and utility expenses.

While the company is exposed to significant changes in certain commodity prices and foreign currency exchange rates, the company actively monitors these exposures and takes various actions to mitigate any negative impacts of these exposures.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

<b>Index</b>	<b>Page</b>
Report of Independent Registered Public Accounting Firm – Consolidated Financial Statements	42
Report of Independent Registered Public Accounting Firm – Consolidated Financial Statements	43
Report of Independent Registered Public Accounting Firm – Internal Control Over Financial Reporting	44
Consolidated Financial Statements	
Consolidated Balance Sheets	45
Consolidated Statements of Net Income	46
Consolidated Statements of Comprehensive Income	46
Consolidated Statements of Cash Flows	47
Consolidated Statements of Equity	48
Notes to Consolidated Financial Statements	
1. Summary of Significant Accounting Policies and Other Information	49
2. Acquisition of Businesses	54
3. Inventories	56
4. Goodwill and Other Intangible Assets	56
5. Other Investments	57
6. Investment in Unconsolidated Affiliate	57
7. Debt	58
8. Financial Instruments and Risk Management	60
9. Fair Value of Assets and Liabilities	60
10. Coal Mining Liability	61
11. Asset Impairments	62
12. Benefit Plans	62
13. Shareholders' Equity	67
14. Income Taxes	70
15. Business Unit Segment Information	71
16. Lease Commitments	75
17. Earnings Per Share	75
18. Selected Quarterly Financial Data (Unaudited)	77
19. Subsequent Event	77

## **Report of Independent Registered Public Accounting Firm**

### **The Board of Directors and Shareholders of Littelfuse, Inc.**

We have audited the accompanying consolidated balance sheets of Littelfuse, Inc. (a Delaware corporation) and subsidiaries (the Company) as of January 2, 2016 and December 27, 2014, and the related consolidated statements of net income, comprehensive income, equity, and cash flows for each of the two years in the period ended January 2, 2016. Our audits of the basic consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15(a)(2). These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Littelfuse, Inc. and subsidiaries as of January 2, 2016 and December 27, 2014, and the results of their operations and their cash flows for each of the two years in the period ended January 2, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

As discussed in Note 1 to the consolidated financial statements, the Company adopted new accounting guidance in 2015 and 2014, related to the presentation of deferred income taxes.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of January 2, 2016, based on criteria established in the 2013 *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 1, 2016, expressed an unqualified opinion.

/s/ GRANT THORNTON LLP

Chicago, Illinois

March 1, 2016

42

---

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

**The Board of Directors and Shareholders of Littelfuse, Inc.**

We have audited the accompanying consolidated statements of net income, comprehensive income, equity, and cash flows of Littelfuse, Inc. for the year ended December 28, 2013. Our audit also included the financial statement schedule listed in the Index at Item 15(a)(2)(i). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, Littelfuse Inc.'s consolidated results of its operations and its cash flows for the year ended December 28, 2013, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ Ernst & Young LLP

Chicago, Illinois

February 25, 2014



## **Report of Independent Registered Public Accounting Firm**

### **The Board of Directors and Shareholders of Littelfuse, Inc.**

We have audited the internal control over financial reporting of Littelfuse, Inc. (a Delaware corporation) and subsidiaries (the Company) as of January 2, 2016, based on criteria established in the 2013 *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 2, 2016, based on criteria established in the 2013 *Internal Control - Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company as of and for the period ended January 2, 2016, and our report dated March 1, 2016, expressed an unqualified opinion on those financial statements.

/s/ GRANT THORNTON LLP

Chicago, Illinois

March 1, 2016

**CONSOLIDATED BALANCE SHEETS**

<b>(In thousands of USD)</b>	<b>January 2, 2016</b>	<b>December 27, 2014</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$328,786	\$297,571
Short-term investments	4,179	4,302
Accounts receivable, less allowances (2015 - \$17,487; 2014 - \$19,418)	142,882	135,356
Inventories	98,629	97,391
Prepaid expenses and other current assets	8,959	13,904
Assets held for sale	—	5,500
Total current assets	583,435	554,024
Property, plant, and equipment:		
Land	5,236	5,697
Buildings	71,383	64,609
Equipment	382,429	370,179
Accumulated depreciation and amortization	(296,480 )	(281,845 )
Net property, plant and equipment	162,568	158,640
Intangible assets, net of amortization:		
Patents, licenses and software	20,221	23,640
Distribution network	16,490	19,428
Customer lists, trademarks and tradenames	54,912	60,605
Goodwill	189,767	196,256
Investments	15,197	12,056
Deferred income taxes	8,333	22,874
Other assets	14,058	23,303
Total assets	\$1,064,981	\$1,070,826
<b>LIABILITIES AND EQUITY</b>		
Current liabilities:		
Accounts payable	\$51,658	\$50,793
Accrued payroll	32,611	30,511
Accrued expenses	24,145	13,059
Accrued severance	3,798	790
Accrued income taxes	10,621	9,045
Current portion of accrued post-retirement benefits	—	11,768
Current portion of long-term debt	87,000	88,500
Total current liabilities	209,833	204,466
Long-term debt, less current portion	84,474	106,658
Deferred income taxes	8,014	11,076
Accrued post-retirement benefits	5,653	5,147
Other long-term liabilities	12,809	15,814
Shareholders' equity:		
Preferred stock, par value \$0.01 per share: 1,000,000 shares authorized; no shares issued and outstanding	—	—
	224	226

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Common stock, par value \$0.01 per share: 34,000,000 shares authorized; shares issued, 2015 –22,420,785; 2014 – 22,585,529		
Treasury stock, at cost: 362,748 and 199,266 shares, respectively	(32,766 )	(18,724 )
Additional paid-in capital	259,553	243,844
Accumulated other comprehensive income	(45,673 )	(21,126 )
Retained earnings	562,717	523,302
Littelfuse, Inc. shareholders' equity	744,055	727,522
Non-controlling interest	143	143
Total equity	744,198	727,665
Total liabilities and equity	\$1,064,981	\$1,070,826

See accompanying Notes to Consolidated Financial Statements.

**CONSOLIDATED STATEMENTS OF NET INCOME**

(In thousands of USD, except per share amounts)	Year Ended		
	January 2, 2016	December 27, 2014	December 28, 2013
Net sales	\$867,864	\$851,995	\$757,853
Cost of sales	537,365	527,567	461,621
Gross profit	330,499	324,428	296,232
Selling, general and administrative expenses	153,714	146,975	132,657
Research and development expenses	30,802	31,122	24,415
Pension settlement expenses	29,928	—	—
Amortization of intangibles	11,898	12,501	9,279
Total operating expenses	226,342	190,598	166,351
Operating income	104,157	133,830	129,881
Interest expense	4,091	4,903	2,917
Impairment and equity in net loss of unconsolidated affiliate	—	—	10,678
Foreign exchange (gain) loss	(1,465 )	3,925	(3,303 )
Other expense (income), net	(5,417 )	(6,644 )	(4,646 )
Income before income taxes	106,948	131,646	124,235
Income taxes	24,482	32,228	35,451
Net income	\$82,466	\$99,418	\$88,784
Income per share:			
Basic	\$3.65	\$4.41	\$3.98
Diluted	\$3.63	\$4.37	\$3.94
Weighted-average shares and equivalent shares outstanding:			
Basic	22,565	22,543	22,315
Diluted	22,719	22,727	22,537

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

(In thousands of USD )	Year Ended		
	January 2, 2016	December 27, 2014	December 28, 2013
Net income	\$82,466	\$99,418	\$88,784
Other comprehensive income (loss):			

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Pension liability adjustments (net of tax of \$106, \$6,308 and (\$5,270), respectively)	(1,761 )	(12,475 )	3,739
Pension and postemployment reclassification adjustments, (net of tax of \$746, \$0 and \$0, respectively)	1,530	—	—
Unrealized gain on investments	793	1,398	1,526
Reclassification of pension settlement costs to expense (net of tax of \$11,742, \$0 and \$0, respectively)	21,124	—	—
Foreign currency translation adjustments	(46,231)	(30,466 )	(1,396 )
Comprehensive income	\$57,921	\$ 57,875	\$ 92,653
See accompanying Notes to Consolidated Financial Statements.			

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(In thousands of USD)	<b>Year Ended</b>		
	<b>January 2, 2016</b>	<b>December 27, 2014</b>	<b>December 28, 2013</b>
<b>Operating activities</b>			
Net income	\$82,466	\$99,418	\$88,784
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	29,701	29,374	25,201
Amortization of intangibles	11,898	12,501	9,279
Impairment of assets	—	293	—
Provision for bad debts	164	130	289
Non-cash inventory charge	—	2,769	1,525
Net loss on pension settlement, net of tax	19,308	—	—
Impairment and equity in net loss of unconsolidated affiliate	—	—	10,678
Loss on sale of property, plant and equipment	1,253	1,042	92
Stock-based compensation	10,266	9,069	8,609
Excess tax benefit on share-based compensation	(1,891 )	(2,843 )	(4,054 )
Deferred income taxes	11,479	(4,488 )	6,640
Changes in operating assets and liabilities:			
Accounts receivable	(14,377 )	(13,062 )	(16,683 )
Inventories	(3,577 )	(2,258 )	(5,486 )
Accounts payable	2,573	17,281	2,000
Accrued expenses (including post-retirement)	6,482	(1,577 )	(8,906 )
Accrued payroll and severance	5,883	2,360	8,032
Accrued taxes	(1,043 )	(549 )	(10,773 )
Prepaid expenses and other	5,241	3,681	2,140
Net cash provided by operating activities	165,826	153,141	117,367
<b>Investing activities</b>			
Acquisitions of businesses, net of cash acquired	(4,558 )	(56,368 )	(144,382 )
Purchases of short-term investments	—	(4,331 )	(8,478 )
Purchase of cost method investment	(3,500 )	—	—
Proceeds from maturities of short-term investments	—	6,770	2,044
Decrease (increase) in entrusted loan receivable (see note 7)	7,811	(17,908 )	—
Purchases of property, plant and equipment	(44,019 )	(32,281 )	(34,953 )
Proceeds from sale of property, plant and equipment	102	125	176
Net cash used in investing activities	(44,164 )	(103,993 )	(185,593 )
<b>Financing activities</b>			
Proceeds from debt	49,000	97,500	260,500
Payments of term debt	(8,750 )	(5,000 )	(1,250 )
Payments of revolving credit facility	(55,500 )	(135,000 )	(123,500 )
Proceeds from exercise of stock options	9,150	14,061	21,959
(Payments) proceeds from entrusted loan (see note 7)	(7,811 )	17,908	—
Debt issuance costs	(42 )	(107 )	(809 )

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Cash dividends paid	(24,341 )	(21,175 )	(18,722 )
Excess tax benefit on share-based compensation	1,891	2,843	4,054
Purchases of common stock	(31,252 )	(14,283 )	—
Net cash (used in) provided by financing activities	(67,655 )	(43,253 )	142,232
Effect of exchange rate changes on cash and cash equivalents	(22,792 )	(13,516 )	(4,218 )
Increase (decrease) in cash and cash equivalents	31,215	(7,621 )	69,788
Cash and cash equivalents at beginning of year	297,571	305,192	235,404
Cash and cash equivalents at end of year	\$328,786	\$297,571	\$305,192

See accompanying Notes to Consolidated Financial Statements.



## CONSOLIDATED STATEMENTS OF EQUITY

(In thousands of USD)	Littelfuse, Inc. Shareholders' Equity						
	Common Stock	Addl. Paid in Capital	Treasury Stock	Accum. Other Comp. Inc. (Loss)	Retained Earnings	Non-controlling Interest	Total
Balance at December 29, 2012	\$220	\$195,803	\$(60,496)	\$16,548	\$435,340	\$ 143	\$587,558
Comprehensive income:							
Net income for the year	—	—	—	—	88,784	—	88,784
Pension liability adjustments *	—	—	—	3,739	—	—	3,739
Unrealized gain on investments	—	—	—	1,526	—	—	1,526
Foreign currency translation adjustments	—	—	—	(1,396 )	—	—	(1,396 )
Comprehensive income							92,653
Stock-based compensation	—	8,609	—	—	—	—	8,609
Withheld 32,671 shares on restricted share units for withholding taxes	—	—	(2,200 )	—	—	—	(2,200 )
Retirement of 1,576,757 shares of treasury stock	—	—	60,343	—	(60,343 )	—	—
Stock options exercised, including tax impact of (\$2,940)	5	19,013	—	—	—	—	19,018
Cash dividends paid (\$0.84 per share)	—	—	—	—	(18,722 )	—	(18,722 )
Balance at December 28, 2013	\$225	\$223,425	\$(2,353 )	\$20,417	\$445,059	\$ 143	\$686,916
Comprehensive income:							
Net income for the year	—	—	—	—	99,418	—	99,418
Pension liability adjustments *	—	—	—	(12,475)	—	—	(12,475 )
Unrealized gain on investments	—	—	—	1,398	—	—	1,398
Foreign currency translation adjustments	—	—	—	(30,466)	—	—	(30,466 )
Comprehensive income							57,875
Stock-based compensation	—	6,926	—	—	—	—	6,926
Withheld 19,439 shares on restricted share units for withholding taxes	—	—	(2,655 )	—	—	—	(2,655 )
Purchase of 161,751 shares of common stock	(2 )	(565 )	(13,716)	—	—	—	(14,283 )
Stock options exercised, including tax impact of (\$2,143)	3	14,058	—	—	—	—	14,061
Cash dividends paid (\$0.94 per share)	—	—	—	—	(21,175 )	—	(21,175 )
Balance at December 27, 2014	\$226	\$243,844	\$(18,724 )	\$(21,126)	\$523,302	\$ 143	\$727,665
Comprehensive income:							
Net income for the year	—	—	—	—	82,466	—	82,466
Pension liability adjustments *	—	—	—	(1,761 )	—	—	(1,761 )

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Pension settlement, including tax impact of (\$11,742)	—	—	—	21,124	—	—	21,124
Pension and postemployment reclassification adjustments, including tax impact of (\$746)	—	—	—	1,530	—	—	1,530
Unrealized gain on investments	—	—	—	793	—	—	793
Foreign currency translation adjustments	—	—	—	(46,231)	—	—	(46,231 )
Comprehensive income							57,921
Stock-based compensation	—	7,782	—	—	—	—	7,782
Withheld 28,286 shares on restricted share units for withholding taxes	—	—	(2,727 )	—	—	—	(2,727 )
Retirement of 214,609 shares of treasury stock	—	—	18,712	—	(18,712 )	—	—
Purchase of 350,000 shares of common stock	(4 )	(1,221 )	(30,027 )	—	—	—	(31,252 )
Stock options exercised, including tax impact of (\$2,485)	2	9,148	—	—	—	—	9,150
Cash dividends paid (\$1.08 per share)	—	—	—	—	(24,341 )	—	(24,341 )
Balance at January 2, 2016	\$224	\$259,553	\$(32,766 )	\$(45,671)	\$562,715	\$ 143	\$744,198

\*Including related tax impact (see Note 14).

See accompanying Notes to Consolidated Financial Statements.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information

*Nature of Operations:* Littelfuse, Inc. and subsidiaries (the “company”) design, manufacture and sell circuit protection devices for use in the automotive, electronics and industrial markets throughout the world. In addition to the broadest and deepest portfolio of circuit protection products and solutions, the company offers a comprehensive line of highly reliable electromechanical and electronic switch and control devices for commercial and specialty vehicles and sensors for automobile safety systems, as well as protection relays and power distribution centers for the safe control and distribution of electricity.

*Fiscal Year:* The company’s fiscal years ended on January 2, 2016, December 27, 2014 and December 28, 2013. Fiscal year 2015 contained 53 weeks while fiscal years 2014 and 2013 each contained 52 weeks.

*Basis of Presentation:* The Consolidated Financial Statements include the accounts of Littelfuse, Inc. and its subsidiaries. All significant intercompany accounts and transactions have been eliminated. The company’s Consolidated Financial Statements were prepared in accordance with generally accepted accounting principles in the United States of America and include the assets, liabilities, revenues and expenses of all wholly-owned subsidiaries and majority-owned subsidiaries over which the company exercises control.

*Use of Estimates:* The process of preparing financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts of assets and liabilities at the date of the Consolidated Financial Statements, and the reported amounts of revenues and expenses and the accompanying notes. The company evaluates and updates its assumptions and estimates on an ongoing basis and may employ outside experts to assist in its evaluation, as considered necessary. Actual results could differ from those estimates.

*Cash Equivalents:* All highly liquid investments, with an original maturity of three months or less when purchased, are considered to be cash equivalents.

*Short-Term and Long-Term Investments:* The company has determined that certain of its investment securities are to be classified as available-for-sale. Available-for-sale securities are carried at fair value with the unrealized gains and losses reported as a component of “Accumulated Other Comprehensive Income (Loss).” Realized gains and losses and declines in unrealized value judged to be other-than-temporary on available-for-sale securities are included in other

expense (income), net. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income. Short-term investments, which are primarily certificates of deposits, are carried at cost which approximates fair value.

*Fair Value of Financial Instruments:* The company's financial instruments include cash and cash equivalents, accounts receivable, investments and long-term debt. The carrying values of such financial instruments approximate their estimated fair values.

*Accounts Receivable:* The company performs credit evaluations of customers' financial condition and generally does not require collateral. Credit losses are provided for in the financial statements based upon specific knowledge of a customer's inability to meet its financial obligations to the company. Historically, credit losses have consistently been within management's expectations and have not been a material amount. A receivable is considered past due if payments have not been received within agreed upon invoice terms. Write-offs are recorded at the time a customer receivable is deemed uncollectible.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information, continued

The company also maintains allowances against accounts receivable for the settlement of rebates and sales discounts to customers. These allowances are based upon specific customer sales and sales discounts as well as actual historical experience.

*Inventories:* Inventories are stated at the lower of cost or market (first in, first out method), which approximates current replacement cost. The company maintains excess and obsolete allowances against inventory to reduce the carrying value to the expected net realizable value. These allowances are based upon a combination of factors including historical sales volume, market conditions, lower of cost or market analysis and expected realizable value of the inventory.

*Investment in Unconsolidated Affiliate:* Investments in unconsolidated affiliates over which the company has significant influence over the investees' operating and financing activities are accounted for under the equity method of accounting. Investments in affiliates over which the company does not have the ability to exert significant influence over the investees' operating and financing activities are accounted for under the cost method.

*Property, Plant and Equipment:* Land, buildings and equipment are carried at cost. Depreciation is calculated using the straight-line method with useful lives of 21 years for buildings, seven to nine years for equipment, seven years for furniture and fixtures, five years for tooling and three years for computer equipment.

*Goodwill and Indefinite-Lived Intangible Assets:* The company annually tests goodwill and indefinite-lived intangible assets for impairment on the first day of its fiscal fourth quarter or at other dates if there is an event or change in circumstances that indicates the asset may be impaired. The company has eight reporting units for testing purposes. Management determines the fair value of each of its reporting units by using a discounted cash flow model (which includes forecasted five-year income statement and working capital projections, a market-based weighted average cost of capital and terminal values after five years) to estimate market value. In addition, the company compares its derived enterprise value on a consolidated basis to the company's market capitalization as of its test date to ensure its derived value approximates the market value of the company when taken as a whole.

As of the most recent annual test conducted on September 27, 2015, the company concluded the fair value of each of the reporting units exceeded its carrying value of invested capital and therefore, no potential goodwill impairment

existed. Specifically, the company noted that its headroom, defined as the excess of fair value over the carrying value of invested capital, was 148%, 95%, 188%, 218%, 76%, 26%, 12% and 198% for its electronics (non-silicon), electronics (silicon), passenger car products, commercial vehicle products, automotive sensor products, relay, custom and power fuse reporting units, respectively, at September 27, 2015. Certain key assumptions used in the annual test included a discount rate of 11.7% and a long-term growth rate of 3.0% which were used for all reporting units except for automotive sensor and relay which had a discount rate of 13.7% as a result of a 2.0% premium factor and custom products which had a discount rate of 14.7% as a result of a 3.0% premium factor.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information, continued

In addition, the company performed a sensitivity test at September 27, 2015 that showed a 100 basis point increase in its discount rate or a 100 basis point decrease in the long-term growth rate for each reporting unit would not have changed the company's conclusion that no potential goodwill impairment existed at September 27, 2015.

The company will continue to perform a goodwill and indefinite-lived intangible asset impairment test as required on an annual basis and on an interim basis, if certain impairment conditions exist. Factors the company considers important, which could result in changes to its estimates, include underperformance relative to historical or projected future operating results and declines in acquisitions and trading multiples. Due to the diverse end user base and non-discretionary product demand, the company does not believe its future operating results will vary significantly relative to its historical and projected future operating results.

*Other Intangible Assets:* Trademarks and tradenames are amortized using the straight-line method over estimated useful lives that have a range of five to 20 years. Patents, licenses and software are amortized using the straight-line method or an accelerated method over estimated useful lives that have a range of seven to 17 years. The distribution networks are amortized on either a straight-line or accelerated basis over estimated useful lives that have a range of three to 20 years. Other intangible assets are also tested for impairment when there is a significant event that may cause the asset to be impaired.

*Environmental Liabilities:* Environmental liabilities are accrued based on engineering studies estimating the cost of remediating sites. Expenses related to on-going maintenance of environmental sites are expensed as incurred. If actual or estimated probable future losses exceed the company's recorded liability for such claims, the company would record additional charges during the period in which the actual loss or change in estimate occurred.

*Pension and Other Post-retirement Benefits:* Accounting for pensions requires estimating the future benefit cost and recognizing the cost over the employee's expected period of employment with the company. Certain assumptions are required in the calculation of pension costs and obligations. These assumptions include the discount rate, salary scales and the expected long-term rate of return on plan assets. The discount rate is intended to represent the rate at which pension benefit obligations could be settled by purchase of an annuity contract. These assumptions are subject to change based on stock and bond market returns and other economic factors. Actual results that differ from the company's assumptions are accumulated and amortized over future periods and therefore generally affect its recognized expense and accrued liability in such future periods. While the company believes that its assumptions are appropriate given current economic conditions and its actual experience, significant differences in results or

significant changes in the company's assumptions may materially affect its pension obligations and related future expense. During 2015, the company terminated the U.S. defined benefit pension plan which resulted in a settlement of the plan's liabilities resulting in a pre-tax charge of \$29.9 million. See Note 12 for additional information.

*Reclassifications:* Certain amounts presented in the 2014 financial statements have been reclassified to conform to the 2015 presentation - specifically a reclassification was made to the company's current deferred tax assets from short-term to long-term. This reclassification resulted from the company's early adoption of ASU 2015-17 "Balance Sheet Classification of Deferred Taxes (ASC 740, income taxes)" which requires all deferred taxes to be presented as long-term. The amount of current deferred tax assets that were reclassified to long-term deferred tax assets for the fiscal year 2014 was \$17.5 million at December 27, 2014. This reclassification had no impact on net income, cash flows or shareholders' equity.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information, continued

*Revenue Recognition:* The company recognizes revenue on product sales in the period in which the sales process is complete. This generally occurs when persuasive evidence of an arrangement exists, products are shipped (FOB origin) to the customer in accordance with the terms of the sale, the risk of loss has been transferred, collectability is reasonably assured and the pricing is fixed and determinable.

At the end of each period, for those shipments where title to the products and the risk of loss and rewards of ownership do not transfer until the product has been received by the customer, the company adjusts revenues and cost of sales for the delay between the time that the products are shipped and when they are received by the customer. The company's distribution channels are primarily through direct sales and independent third party distributors.

*Revenue and Billing:* The company accepts orders from customers based on long term purchasing contracts and written sales agreements. Contract pricing and selling agreement terms are based on market factors, costs and competition. Pricing normally is negotiated as an adjustment (premium or discount) from the company's published price lists. The customer is invoiced when the company's products are shipped to them in accordance with the terms of the sales agreement.

*Returns and Credits:* Some of the terms of the company's sales agreements and normal business conditions provide customers (distributors) the ability to receive price adjustments on products previously shipped and invoiced. This practice is common in the industry and is referred to as a "ship and debit" program. This program allows the distributor to debit the company for the difference between the distributors' contracted price and a lower price for specific transactions. Under certain circumstances (usually in a competitive situation or large volume opportunity), a distributor will request authorization to reduce its price to its buyer. If the company approves such a reduction, the distributor is authorized to "debit" its account for the difference between the contracted price and the lower approved price. The company establishes reserves for this program based on historic activity and actual authorizations for the debit and recognizes these debits as a reduction of revenue.

*Return to Stock:* The company has a return to stock policy whereby a customer with prior authorization from Littelfuse management can return previously purchased goods for full or partial credit. The company establishes an estimated allowance for these returns based on historic activity. Sales revenue and cost of sales are reduced to anticipate estimated returns.

*Volume Rebates:* The company offers incentives to certain customers to achieve specific quarterly or annual sales targets. If customers achieve their sales targets, they are entitled to rebates. The company estimates the future cost of these rebates and recognizes this estimated cost as a reduction to revenue as products are sold.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information, continued

*Allowance for Doubtful Accounts:* The company evaluates the collectability of its trade receivables based on a combination of factors. The company regularly analyzes its significant customer accounts and, when the company becomes aware of a specific customer's inability to meet its financial obligations, the company records a specific reserve for bad debt to reduce the related receivable to the amount the company reasonably believes is collectible. The company also records allowances for all other customers based on a variety of factors including the length of time the receivables are past due, the financial health of the customer, macroeconomic considerations and past experience. Accounts receivable balances that are deemed to be uncollectible, are written off against the reserve on a case-by-case basis. Historically, the allowance for doubtful accounts has been adequate to cover bad debts. If circumstances related to specific customers change, the estimates of the recoverability of receivables could be further adjusted. However, due to the company's diverse customer base and lack of credit concentration, the company does not believe its estimates would be materially impacted by changes in its assumptions.

*Advertising Costs:* The company expenses advertising costs as incurred, which amounted to \$2.3 million in 2015, \$2.8 million in 2014 and \$1.6 million in 2013, and are included as a component of selling, general and administrative expenses.

*Shipping and Handling Fees and Costs:* Amounts billed to customers related to shipping and handling is classified as revenue. Costs incurred for shipping and handling of \$7.0 million, \$6.7 million and \$6.5 million in 2015, 2014 and 2013, respectively, are classified in selling, general and administrative expenses.

*Foreign Currency Translation/Remeasurement:* The company's foreign subsidiaries use the local currency or the U.S. dollar as their functional currency, as appropriate. Assets and liabilities are translated using exchange rates at the balance sheet date, and revenues and expenses are translated at weighted average rates. The amount of foreign currency gain or loss from remeasurement recognized in the income statement was a loss of \$7.9 million in 2015, a loss of \$4.6 million in 2014 and a gain of \$5.2 million in 2013. Adjustments from the translation process are recognized in "Shareholders' equity" as a component of "Accumulated other comprehensive income."

*Stock-based Compensation:* The company recognizes compensation expense for the cost of awards of equity compensation using a fair value method. Benefits of tax deductions in excess of recognized compensation expense are reported as both operating and financing cash flows. See Note 13 for additional information on stock-based compensation.

*Other Expense (Income), Net:* Other expense (income), net consisting of interest income, royalties and non-operating income, was (\$5.4 million), (\$6.6 million) and (\$4.6 million) of income in 2015, 2014, and 2013, respectively.

*Income Taxes:* The company accounts for income taxes using the liability method. Deferred taxes are recognized for the future effects of temporary differences between financial and income tax reporting using enacted tax rates in effect for the years in which the differences are expected to reverse. The company recognizes deferred taxes for temporary differences, operating loss carryforwards and tax credit carryforwards. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Federal and state income taxes are provided on the portion of foreign income that is expected to be remitted to the U.S. and be taxable.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies and Other Information, continued

*Accounting Pronouncements:* In November 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (“ASU”) No. 2015-17 – Income taxes (Topic 740): Balance Sheet Classification of Deferred Taxes, which simplifies the balance sheet classification of deferred taxes. The new guidance requires that all deferred taxes be presented as noncurrent. The company has adopted the new guidance for the year ended January 2, 2016 with all prior periods presented retrospectively adjusted to conform to the new ASU.

In May 2014, the FASB amended prior authoritative guidance for revenue recognition which provides a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most current revenue recognition guidance. The standard is effective for public entities for annual and interim periods beginning after December 15, 2016. Early adoption is not permitted. The guidance permits two implementation approaches, one requiring retrospective application of the new standard with restatement of prior years and one requiring prospective application of the new standard with disclosure of results under old standards. The company is currently evaluating the impact of the adoption of this accounting standard on its consolidated financial statements.

### 2. Acquisition of Businesses

The company accounts for acquisitions using the purchase method in accordance with ASC 805, “Business Combinations.” The results of operations of each acquisition have been included in the accompanying consolidated financial statements as of the dates of the acquisition. Acquisition-related costs associated with acquisition activity were \$4.6 million, \$0.5 million and \$1.7 million for fiscal years 2015, 2014, and 2013, respectively and were recorded in Selling, general and administrative expenses.

#### *Sigmar S.r.l*

On October 1, 2015, the company acquired 100% of Sigmar S.r.l. (“Sigmar”). The total purchase price for Sigmar is \$5.4 million, net of cash acquired, subject to post-closing adjustments. The purchase also includes an earn-out clause of an additional payment of up to \$0.6 million, subject to the achievement of certain milestones.

Located in Ozegna, Italy, Sigmar is a leading global manufacturer of water-in-fuel and selective catalytic reduction (SCR) quality sensors, as well as diesel fuel heaters, solenoid valves and rotating oil filters for automotive and commercial vehicle applications. The acquisition further expands the company's automotive sensor product line offerings within its Automotive business segment. The company funded the acquisition with available cash.

The following table sets forth the preliminary purchase price allocation for Sigmar acquisition-date net assets, in accordance with the purchase method of accounting with adjustments to record the acquired net assets at their estimated fair values.

Sigmar preliminary purchase price allocation (in thousands):	
Cash	\$230
Current assets, net	4,011
Property, plant and equipment	1,097
Goodwill	2,060
Patents	2,845
Current liabilities	(1,704)
Other non-current liabilities	(2,906)
	\$5,633

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****2. Acquisition of Businesses, continued**

All Sigmar goodwill and other assets and liabilities were recorded in the Automotive business unit segment and reflected in the Europe geographical area. The patents are being amortized over 10 years. The goodwill resulting from this acquisition consists largely of the company's expected future product sales and synergies from combining Sigmar's products with the company's existing automotive product offerings. Goodwill for the above acquisition is not expected to be deductible for tax purposes.

*SymCom*

On January 3, 2014, the company acquired 100% of SymCom, Inc. ("SymCom") for \$52.8 million net of cash acquired. Located in Rapid City, South Dakota, SymCom provides overload relays and pump controllers primarily to the industrial market. The acquisition allows the company to strengthen its position in the relay products market by adding new products and new customers within its Industrial business unit segment. The company funded the acquisition with available cash and proceeds from credit facilities.

The following table sets forth the final purchase price allocation for SymCom acquisition-date net assets, in accordance with the purchase method of accounting with adjustments to record the acquired net assets at their estimated fair values.

SymCom final purchase price allocation (in thousands):	
Cash	\$325
Current assets, net	9,154
Property, plant and equipment	11,193
Goodwill	15,018
Trademarks	17,020
Patents	1,500
Other non-current assets	20
Current liabilities	(1,137)
	\$53,093

All SymCom goodwill and other assets and liabilities were recorded in the Industrial business segment and reflected in the Americas geographical area. The trademarks are being amortized over 15 to 20 years. The patents are being amortized over 16 to 17 years. The goodwill resulting from this acquisition consists largely of the company's expected future product sales and synergies from combining SymCom's products with the company's existing electrical product offerings. Goodwill for the above acquisition is expected to be deductible for tax purposes.

As required by purchase accounting rules, the company initially recorded a \$2.6 million step-up of inventory to its fair value as of the acquisition date based on the preliminary valuation. During the first quarter of 2014, as a portion of this inventory was sold, cost of goods sold included a \$1.4 million non-cash charge for this step-up.

During the second quarter of 2014, the inventory step-up valuation was finalized at \$2.8 million which resulted in an additional \$1.4 million non-cash charge to cost of goods sold for the second quarter of 2014. Pro forma financial information is not presented for the above acquisitions due to amounts not being materially different than actual results.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 3. Inventories

The components of inventories at January 2, 2016 and December 27, 2014 are as follows (in thousands):

	<b>2015</b>	<b>2014</b>
Raw materials	\$33,599	\$29,756
Work in process	16,479	15,164
Finished goods	48,551	52,471
Total	\$98,629	\$97,391

### 4. Goodwill and Other Intangible Assets

The amounts for goodwill and changes in the carrying value by business unit segment are as follows at January 2, 2016 and December 27, 2014 (in thousands):

	<b>2015</b>	<b>Additions (Reductions)<sup>(a)</sup></b>	<b>Adjustments<sup>(c)</sup></b>	<b>2014</b>	<b>Additions (Reductions)<sup>(b)</sup></b>	<b>Adjustments<sup>(c)</sup></b>	<b>2013</b>
Electronics	\$58,246	\$ (524 )	\$ (1,740 )	\$60,510	\$ 1,654	\$ (1,590 )	\$60,446
Automotive	80,262	1,994	(3,449 )	81,717	—	(3,264 )	84,981
Industrial	51,259	—	(2,770 )	54,029	14,920	(1,928 )	41,037
Total	\$189,767	\$ 1,470	\$ (7,959 )	\$196,256	\$ 16,574	\$ (6,782 )	\$186,464

<sup>(a)</sup> Electronics reduction resulted from reclassification of goodwill to customer lists. Automotive addition of \$2.0 million resulted from business acquisitions.

<sup>(b)</sup> Electronics addition of \$1.7 million and Industrial addition of \$14.9 million in 2014 resulted from business acquisitions.

<sup>(c)</sup> Adjustments reflect the impact of changes in foreign exchange rates.

There were no accumulated goodwill impairment losses at January 2, 2016, December 27, 2014 or December 28, 2013.

The company recorded amortization expense of \$11.9 million in 2015, \$12.5 million in 2014 and \$9.3 million in 2013. The details of other intangible assets and related future amortization expense of existing intangible assets at January 2,

2016 and December 27, 2014 are as follows:

(in thousands)	2015			2014		
	Weighted Gross		Accumulated Amortization	Weighted Gross		Accumulated Amortization
	Average Carrying	Useful Life		Average Carrying	Useful Life	
Patents, licenses and software <sup>(a)</sup>	\$ 61,297	11.6	\$ 41,076	\$ 62,378	11.7	\$ 38,738
Distribution network <sup>(a)</sup>	45,564	12.4	29,074	46,850	12.4	27,422
Customer lists, trademarks and tradenames <sup>(a)</sup>	81,233	13.0	30,534	80,821	13.2	25,246
Tradenames <sup>(b)</sup>	4,213	—	—	5,030	—	—
Total	\$ 192,307	12.4	\$ 100,684	\$ 195,079	12.5	\$ 91,406

<sup>(a)</sup> Decrease to gross carrying value in 2015 primarily due to the impact of foreign currency translation adjustments partially offset by the preliminary Sigmar acquisition purchase price allocation discussed in Note 2.

<sup>(b)</sup> Tradenames with indefinite lives.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****4. Goodwill and Other Intangible Assets, continued**

Estimated amortization expense related to intangible assets with definite lives at January 2, 2016 is as follows (in thousands):

2016	\$ 11,162
2017	10,745
2018	10,628
2019	10,582
2020	10,582
2021 and thereafter	33,711
	\$87,410

**5. Other Investments**

The company's other investments represent shares of Polytronics Technology Corporation Ltd. ("Polytronics"), a Taiwanese company and shares of Monolith Semiconductor, Inc. ("Monolith"), a Texas-based startup company.

*Polytronics*

The Polytronics investment was acquired as part of the Littelfuse GmbH acquisition. The company's Polytronics shares held at the end of fiscal 2015 and 2014 represent approximately 7.2% of total Polytronics shares outstanding. The fair value of the Polytronics investment was €10.7 million (approximately \$11.7 million) at January 2, 2016 and €9.9 million (approximately \$12.1 million) at December 27, 2014. Included in 2015 other comprehensive income is an unrealized gain of \$0.9 million, due to the increase in fair market value of the Polytronics investment. The remaining movement year over year was due to the impact of changes in exchange rates.

*Monolith*

In December 2015, the company invested \$3.5 million in the preferred stock of Monolith, a U.S. start-up company developing silicon carbide (SiC) technology, which represents approximately 12% of the common stock of Monolith on an as-converted basis. The company accounts for its investment in Monolith under the cost method with any changes in value recorded in other comprehensive income. The value of the Monolith investment was \$3.5 million at January 2, 2016.

## **6. Investment in Unconsolidated Affiliate**

Investments in unconsolidated entities over which the company has significant influence over the investees' operating and financing activities are accounted for under the equity method of accounting. Investments in affiliates in which the company does not have such ability are accounted for under the cost method of accounting.

In April 2012, the company invested an additional \$10.0 million in certain common and preferred stock of Shocking Technologies, Inc. ("Shocking") increasing its previous investment interest in Shocking to \$16.0 million or approximately 18.4%. In addition, in late-November 2012, the company provided an additional \$2.0 million short-term secured loan to Shocking and determined that the company then had the ability to exert significant influence. As a result, the company began accounting for the investment in Shocking using the equity method. In accordance with ASC 323, the company retroactively recorded its proportional share of Shocking's operating losses, which amounted to approximately \$4.0 million in 2012.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****6. Investment in Unconsolidated Affiliate, continued**Impairment

During the first quarter of 2013, the company fully impaired its investment in a loan receivable from Shocking owing to their filing for Chapter 7 bankruptcy on March 12, 2013. The impairment charge of approximately \$10.7 million consisted of the remaining equity method investment of \$8.7 million and a \$2.0 million loan receivable, and reduced the carrying value of both the investment and loan receivable to zero at March 30, 2013.

During the fourth quarter of 2013, the company incurred a \$6.1 million charge to income tax expense related to the company's investment in Shocking which had been fully impaired and written off as described above. \$3.3 million of this charge was pushed back to the first quarter of 2013 with the remaining \$2.8 million (which related to the fourth quarter of 2012) recorded in the fourth quarter of 2013 as the correction of an immaterial error under ASC 250. This charge was determined to be a capital loss for tax purposes, instead of an ordinary loss as the company had previously determined in consultation with a third party expert.

**7. Debt**

The carrying amounts of debt at January 2, 2016 and December 27, 2014 are as follows (in thousands):

	<b>2015</b>	<b>2014</b>
Term loan	\$85,000	\$93,750
Revolving credit facility	77,000	83,500
Entrusted loan	9,474	17,908
Total debt	171,474	195,158
Less: Current maturities	87,000	88,500
Total long-term debt	\$84,474	\$106,658

*Term Loan and Revolving Credit Facilities*

On May 31, 2013, the company entered into a new credit agreement with J.P. Morgan Securities LLC for up to \$325.0 million which consists of an unsecured revolving credit facility of \$225.0 million and an unsecured term loan of \$100.0 million. The credit agreement is for a five year period. At January 2, 2016, the company had available \$197.9 million of borrowing capacity under the credit agreement at an interest rate of LIBOR plus 1.25%, or a total interest rate of 1.68% as of January 2, 2016.

The credit agreement replaced the company's previous credit agreement dated June 13, 2011, which was terminated on May 31, 2013.

The company incurred debt issuance costs of \$0.8 million which will be amortized over the life of the new credit agreement.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 7. Debt, continued

On January 30, 2014, the company increased the unsecured revolving credit facility entered into on May 31, 2013 by \$50.0 million, thereby increasing the total revolver borrowing capacity from \$225.0 million to \$275.0 million. The company incurred debt issuance costs of \$0.1 million which will be amortized over the life of the existing credit agreement.

This arrangement contains covenants that, among other matters, impose limitations on the incurrence of additional indebtedness, future mergers, sales of assets, payment of dividends and changes in control, as defined in the agreement. In addition, the company is required to satisfy certain financial covenants and tests relating to, among other matters, interest coverage and leverage. At January 2, 2016, the company was in compliance with all covenants under the revolving credit facility.

The company assumed three credit lines with the acquisition of Hamlin totaling RMB 41.0 million (approximately \$6.6 million) as of June 29, 2013 with expiration dates from August 23, 2013 through April 22, 2014. Two of these credit lines expired during the third quarter of 2013 and the remaining credit line expired during the second quarter of 2014.

For the fiscal years ended January 2, 2016, December 27, 2014 and December 28, 2013, the company had \$0.1, \$0.8 and \$0.8 million outstanding in letters of credit, respectively. No amounts were drawn under these lines of credit at January 2, 2016.

#### *Entrusted Loan*

During 2014, the company entered into an entrusted loan arrangement (“Entrusted Loan”) of RMB 110.0 million (approximately \$17.9 million) between two of its China legal entities, Littelfuse Semiconductor (Wuxi) Company (the “Lender”) and Suzhou Littelfuse OVS Ltd. (the “Borrower”), utilizing Bank of America, N.A., Shanghai Branch as agent. Direct borrowing and lending between two commonly owned commercial entities was strictly forbidden at the time under China’s regulations requiring the use of a third party agent to enable loans between Chinese legal entities. As a result, the Entrusted Loan is reflected as both a long-term asset and long-term debt on the company’s Consolidated Balance Sheets and is reflected in the investing and financing activities in its Consolidated Statements of Cash Flows. Interest expense and interest income will be recorded between the lender and borrower with no net impact on the

company's Consolidated Statements of Income since the amounts will be offsetting. The loan interest rate per annum is 5.25%. The Entrusted Loan is used to finance the operation and working capital needs of the borrower and matures in November 2019. The balance of the Entrusted Loan was RMB 61.5 million (approximately \$9.5 million) at January 2, 2016.

Interest paid on all company debt was approximately \$4.1 million in 2015, \$4.9 million in 2014 and \$2.9 million in 2013.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 8. Financial Instruments and Risk Management

Occasionally, the company uses financial instruments to manage its exposures to movements in commodity prices, foreign exchange and interest rates. The use of these financial instruments modifies the company's exposure to these risks with the goal of reducing the risk or cost to the company. The company does not use derivatives for trading purposes and is not a party to leveraged derivative contracts.

### 9. Fair Value of Assets and Liabilities

Applicable accounting literature establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Applicable accounting literature defines levels within the hierarchy based on the reliability of inputs as follows:

Level 1—Valuations based on unadjusted quoted prices for identical assets or liabilities in active markets;

Level 2—Valuations based on quoted prices for similar assets or liabilities or identical assets or liabilities in less active markets, such as dealer or broker markets; and

Level 3—Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable, such as pricing models, discounted cash flow models and similar techniques not based on market, exchange, dealer or broker-traded transactions.

Following is a description of the valuation methodologies used for instruments measured at fair value and their classification in the valuation hierarchy.

#### *Investments*

Investments in equity securities listed on a national market or exchange are valued at the last sales price. Such securities are further detailed in Note 5 and classified within Level 1 of the valuation hierarchy.

The company has an investment in Monolith as described in Note 5 to the Notes to Consolidated Financial Statements for which the value of \$3.5 million represents the cost of the investment.

There were no changes during the year ended January 2, 2016 to the company's valuation techniques used to measure asset and liability fair values on a recurring basis. As of January 2, 2016 and December 27, 2014, the company held no non-financial assets or liabilities that are required to be measured at fair value on a recurring basis.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 9. Fair Value of Assets and Liabilities, continued

The following table presents assets measured at fair value by classification within the fair value hierarchy as of January 2, 2016 (in thousands):

	Fair Value Measurements Using					
	Quoted Prices in Active Markets for Identical Assets (Level 1)			Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investment in Polytronics	\$ 11,697	\$	—	\$	—	\$ 11,697
Total	\$ 11,697	\$	—	\$	—	\$ 11,697

The following table presents assets measured at fair value by classification within the fair value hierarchy as of December 27, 2014 (in thousands):

	Fair Value Measurements Using					
	Quoted Prices in Active Markets for Identical Assets (Level 1)			Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investment in Polytronics	\$ 12,056	\$	—	\$	—	\$ 12,056
Total	\$ 12,056	\$	—	\$	—	\$ 12,056

The company's other financial instruments include cash and cash equivalents, short-term investments, accounts receivable and long-term debt. Due to their short-term maturity, the carrying amounts of cash and cash equivalents, short-term investments and accounts receivable approximate their fair values. The company's long-term debt fair value approximates book value at January 2, 2016 and December 27, 2014.

## **10. Coal Mining Liability**

Included in other long-term liabilities is an accrual related to former coal mining operations at Littelfuse GmbH (formerly known as Heinrich Industries, AG) for the amounts of €1.8 million (\$2.0 million) and €1.9 million (\$2.4 million) at January 2, 2016 and December 27, 2014, respectively. Management, in conjunction with an independent third-party, performs an annual evaluation of the former coal mining operations in order to develop an estimate of the probable future obligations in regard to remediating the dangers (such as a shaft collapse) of abandoned coal mine shafts in the former coal mining operations. Management accrues for costs associated with such remediation efforts based on management's best estimate when such costs are probable and reasonably able to be estimated. The ultimate determination can only be done after respective investigations because the concrete conditions are mostly unknown at this time. The accrual is not discounted as management cannot reasonably estimate when such remediation efforts will take place.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 11. Asset Impairments

The company recorded no impairments of assets during the year ended January 2, 2016.

For the year ended December 27, 2014, the company recorded an asset impairment charge of approximately \$0.3 million within selling, general and administrative expenses. This charge reflects the write-down of assets from project cancellations. The charge was recognized as an “other” charge for segment reporting purposes. The carrying values of the company’s assets held for sale were \$0.0 million and \$5.5 million for the previously closed manufacturing facility in Des Plaines, Illinois as of January 2, 2016 and December 27, 2014, respectively.

### 12. Benefit Plans

The company previously had a company-sponsored defined benefit pension plan, the Littelfuse Inc. Retirement Plan, which covered certain of its North American employees. The amount of the retirement benefit was based on years of service and final average pay. The plan also provided a temporary supplemental retirement income benefit to help retirees pay the cost of post-retirement medical coverage if the retiree has reached age 62 and has provided at least ten years of service prior to retirement. Such benefits generally cease once the retiree attains age 65. The plan was frozen in 2009 and terminated in 2015 as described below.

The company also has company-sponsored defined benefit pension plans covering employees in the U.K., Germany, Japan, Singapore and the Philippines. The amount of the retirement benefits provided under the plans is based on years of service and final average pay.

#### *Littelfuse Inc. Retirement Plan Termination*

The company received approval from the IRS on April 14, 2015 on its Application for Determination for Terminating Plan to terminate the U.S. defined benefit pension plan, the Littelfuse Inc. Retirement Plan, effective July 30, 2014. All plan liabilities were settled (either via lump sum payout or purchase of a group annuity contract) in the third quarter of 2015. A cash contribution of \$9.1 million was made to the U.S. defined benefit plan’s trust in the third quarter of 2015 to fully fund the plan on a buyout basis, and the eventual settlement of the plan’s liabilities triggered a

settlement charge of \$30.2 million in the third quarter of 2015. In the fourth quarter of 2015 there was an adjustment to the price of the annuity contract which resulted in a refund of premium to the company of \$0.3 million. This refund of premium, effectively a re-measurement gain, was recognized in the fourth quarter of 2015 as a dollar-for-dollar adjustment to the \$30.2 million earnings charge recognized in the third quarter of 2015, resulting in a final settlement loss of \$29.9 million for the fiscal year ended January 2, 2016.

Total pension expense was \$32.4 million, \$0.3 million and \$0.8 million in 2015, 2014 and 2013, respectively. The increase in pension expense in 2015 primarily resulted from the termination and settlement of the U.S. plan. The decrease in pension expense in 2014 resulted from returns on assets exceeding interest and service costs.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 12. Benefit Plans, continued

Benefit plan related information is as follows:

(In thousands)	2015			2014		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Change in benefit obligation:						
Benefit obligation at beginning of year	\$ 105,759	\$ 52,740	\$ 158,499	\$ 84,422	\$ 50,331	\$ 134,753
Service cost	750	824	1,574	600	925	1,525
Interest cost	3,093	1,735	4,828	3,884	2,060	5,944
Net actuarial loss (gain)	(9,127 )	648	(8,479 )	22,025	5,652	27,677
Benefits paid from the trust	(100,475)	(1,732 )	(102,207)	(5,172 )	(2,525 )	(7,697 )
Benefits paid directly by company	—	(410 )	(410 )	—	(155 )	(155 )
Curtailments and settlements	—	(294 )	(294 )	—	—	—
Effect of exchange rate movements	—	(3,229 )	(3,229 )	—	(3,548 )	(3,548 )
Benefit obligation at end of year	\$—	\$ 50,282	\$ 50,282	\$ 105,759	\$ 52,740	\$ 158,499
Change in plan assets at fair value:						
Fair value of plan assets at beginning of year	\$ 93,991	\$ 47,593	\$ 141,584	\$ 83,748	\$ 42,477	\$ 126,225
Actual return on plan assets	(2,375 )	389	(1,986 )	10,416	5,141	15,557
Employer contributions	8,859	1,072	9,931	5,000	5,596	10,596
Benefits paid	(100,475)	(1,732 )	(102,207)	(5,173 )	(2,525 )	(7,698 )
Effect of exchange rate movements	—	(2,693 )	(2,693 )	—	(3,096 )	(3,096 )
Fair value of plan assets at end of year	—	44,629	44,629	93,991	47,593	141,584
Net amount recognized/(unfunded status)	\$—	\$(5,653 )	\$(5,653 )	\$(11,768 )	\$(5,147 )	\$(16,915 )
Amounts recognized in the Consolidated Balance Sheet consist of:						
Current portion of accrued benefit liability	\$—	\$—	\$—	\$(11,768 )	\$—	\$(11,768 )
Accrued benefit liability	—	(5,653 )	(5,653 )	—	(5,147 )	(5,147 )
Total liability recognized	\$—	\$(5,653 )	\$(5,653 )	\$(11,768 )	\$(5,147 )	\$(16,915 )
Accumulated other comprehensive loss	\$—	\$ 9,383	\$ 9,383	\$ 34,801	\$ 7,671	\$ 42,472

Amounts recognized in accumulated other comprehensive income (loss), pre-tax consist of:

(In thousands)	2015			2014		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Net actuarial loss	\$—	\$ 9,383	\$ 9,383	\$ 34,801	\$ 7,671	\$ 42,472

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Prior service (cost)	—	—	—	—	—
Net amount recognized /occurring, pre-tax	\$—9,383	\$9,383	\$34,801	\$7,671	\$42,472



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 12. Benefit Plans, continued

The estimated net actuarial loss (gain) which will be amortized from accumulated other comprehensive income (loss) into benefit cost in 2016 is approximately \$0.3 million.

(In thousands)	U.S.			Foreign		
	2015	2014	2013	2015	2014	2013
Components of net periodic benefit cost:						
Service cost	\$750	\$600	\$600	\$824	\$925	\$744
Interest cost	3,093	3,884	3,565	1,735	2,060	1,376
Expected return on plan assets	(2,749 )	(5,646)	(5,360)	(2,346)	(2,292)	(1,207)
Amortization of prior service (credit)	—	—	—	—	—	—
Amortization of losses	870	549	942	221	216	130
Total cost (credit) of the plan for the year	1,964	(613 )	(253 )	434	909	1,043
Expected plan participants' contributions	—	—	—	—	—	—
Net periodic benefit cost (credit)	1,964	(613 )	(253 )	434	909	1,043
Settlement loss	29,928	—	—	—	—	—
Total expense (income) for the year	\$31,892	\$(613 )	\$(253 )	\$434	\$909	\$1,043

Weighted average assumptions used to determine net periodic benefit cost for the years 2015, 2014 and 2013 are as follows:

	U.S.			Foreign		
	2015	2014	2013	2015	2014	2013
Discount rate	3.9%	4.8 %	3.9 %	3.7%	3.7 %	4.5 %
Expected return on plan assets	6.8%	6.8 %	6.8 %	5.1%	4.9 %	4.8 %
Compensation increase rate	—	—	—	5.3%	3.8 %	3.6 %
Measurement dates	9/30/15	12/31/14	12/31/13	12/31/15	12/31/14	12/31/13

The accumulated benefit obligation for the U.S. defined benefit plan was \$0.0 million and \$105.8 million at January 2, 2016 and December 27, 2014, respectively. The accumulated benefit obligation for the foreign plans was \$46.2 million and \$48.9 million at January 2, 2016 and December 27, 2014, respectively.

Weighted average assumptions used to determine benefit obligations at year-end 2015, 2014 and 2013 are as follows:

	<b>U.S.</b>			<b>Foreign</b>		
	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Discount rate	3.9%	3.9 %	4.8 %	3.8%	3.7 %	4.5 %
Compensation increase rate	—	—	—	6.2%	5.3 %	3.8 %
Measurement dates	12/31/15	12/31/14	12/31/13	12/31/15	12/31/14	12/31/13

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****12. Benefit Plans, continued**

Expected benefit payments to be paid to participants for the fiscal year ending are as follows (in thousands):

<b>Year</b>	<b>Expected Benefit Payments (Foreign)</b>
2016	1,964
2017	2,012
2018	2,032
2019	2,065
2020	2,101
2021-2025	11,831

*Defined Benefit Plan Assets*

Based upon analysis of the target asset allocation and historical returns by type of investment, the company has assumed that the expected long-term rate of return will be 5.1% on foreign plan assets. Assets are invested to maximize long-term return taking into consideration timing of settlement of the retirement liabilities and liquidity needs for benefits payments. Pension plan assets were invested as follows, and were not materially different from the target asset allocation:

	<b>U.S. Asset Allocation</b>		<b>Foreign Asset Allocation</b>			
	<b>2015*</b>	<b>2014</b>	<b>2015</b>	<b>2014</b>		
Equity securities	0	% 0	% 30	% 30	%	%
Debt securities	0	% 91	% 65	% 68	%	%
Cash	0	% 9	% 5	% 2	%	%
	0	% 100	% 100	% 100	%	%

\* The U.S. pension plan was terminated during the third quarter of 2015 as described above.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 12. Benefit Plans, continued

The following table presents the company's pension plan assets measured at fair value by classification within the fair value hierarchy as of January 2, 2016 (in thousands):

	Fair Value Measurements Using			
	Quoted	Significant	Significant	Total
	Prices	Other	Unobservable	
	in	Observable	Inputs	
	Active	Inputs	(Level 3)	
	Markets	(Level 2)		
	for			
	Identical			
	Assets			
	(Level			
	1)			
Equities:				
Global Equity 50:50 Index Fund	\$—	\$ 12,801	\$ —	\$12,801
Philippine Stock	836	—	—	836
Fixed income:				
Investment grade corporate bond funds	6,807	—	—	6,807
Over 15y Gilts Index Fund	—	3,428	—	3,428
Active Corp Bond – Over 10 Yr Fund	—	6,440	—	6,440
Over 5y Index-Linked Gilts Fund	—	10,248	—	10,248
Philippine Long Govt Securities	1,227	—	—	1,227
Philippine Long Corporate Bonds	781	—	—	781
Cash and equivalents	2,061	—	—	2,061
Total pension plan assets	\$11,712	\$ 32,917	\$ —	\$44,629

The following table presents the company's pension plan assets measured at fair value by classification within the fair value hierarchy as of December 27, 2014 (in thousands):

	Fair Value Measurements Using			Total
	Quoted	Significant	Significant	
	Prices	Other	Unobservable	
	in	Observable	Inputs	

	<b>Active Markets</b>	<b>Inputs (Level 2)</b>	<b>(Level 3)</b>		
	<b>for Identical Assets (Level 1)</b>				
Equities:					
Global Equity 50:50 Index Fund	\$—	\$ 13,168	\$	—	\$13,168
Philippine Stock	1,069	—		—	1,069
Fixed income:					
Long U.S. Credit Corp Index Fund	—	42,911		—	42,911
Long U.S. Govt Bond Index Fund	—	24,116		—	24,116
Intermediate U.S. Govt Bond Index Fund	—	18,884		—	18,884
Investment grade corporate bond funds	8,118	—		—	8,118
Over 15y Gilts Index Fund	—	3,814		—	3,814
Active Corp Bond – Over 10 Yr Fund	—	7,065		—	7,065
Over 5y Index-Linked Gilts Fund	—	11,352		—	11,352
Philippine Long Govt Securities	1,059	—		—	1,059
Philippine Long Corporate Bonds	781	—		—	781
Cash and equivalents	9,247	—		—	9,247
Total pension plan assets	\$20,274	\$ 121,310	\$	—	\$141,584

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 12. Benefit Plans, continued

#### *Defined Contribution Plans*

The company also maintains a 401(k) savings plan covering substantially all U.S. employees. The company matches 100% of the employee's annual contributions for the first 4% of the employee's eligible compensation. Employees are immediately vested in their contributions plus actual earnings thereon, as well as the company contributions. Company matching contributions amounted to \$2.8 million, \$2.1 million and \$1.7 million in each of the years 2015, 2014 and 2013, respectively.

The company has a non-qualified Supplemental Retirement and Savings Plan. The company will provide additional retirement benefits for certain management employees and named executive officers by allowing participants to contribute up to 90% of their annual compensation with matching contributions of 4% and 5% of the participant's annual compensation in excess of the IRS compensation limits.

The company previously provided additional retirement benefits for certain key executives through its unfunded defined contribution Supplemental Executive Retirement Plan ("SERP"). The company amended the SERP during 2009 to freeze contributions and set the annual interest rate credited to the accounts until distributed at the five-year Treasury constant maturity rate. The charge to expense for the SERP plan amounted to \$0.1 million in 2015 and less than \$0.1 million in each of 2014 and 2013.

### 13. Shareholders' Equity

*Equity Plans:* The company has equity-based compensation plans authorizing the granting of stock options, restricted shares, restricted share units, performance shares and other stock rights of employees and directors. As of January 2, 2016, there were approximately 0.6 million shares available for issuance of future awards under the company's equity-based compensation plans.

Stock options granted prior to 2002 vested over a five-year period and are exercisable over a ten-year period commencing from the date of vesting. The stock options granted in 2002 through February 2005 vested over a

five-year period and are exercisable over a ten-year period commencing from the date of the grant. Stock options granted after February 2005 vest over a three, four or five-year period and are exercisable over either a seven or ten-year period commencing from the date of the grant. Restricted shares and share units granted by the company vest over three to four years.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 13. Shareholders' Equity, continued

The following table provides a reconciliation of outstanding stock options for the fiscal year ended January 2, 2016.

	Shares	Weighted Average Price	Weighted Average Remaining Contract Life (Years)	Aggregate Intrinsic Value (000's)
Outstanding December 27, 2014	421,862	\$ 67.88		
Granted	145,140	96.18		
Exercised	(95,548 )	48.74		
Forfeited	(550 )	29.68		
Outstanding January 2, 2016	470,904	80.53	4.8	\$ 12,470
Exercisable January 2, 2016	199,472	66.23	3.6	8,135

The following table provides a reconciliation of non-vested restricted share and share unit awards for the fiscal year ended January 2, 2016.

	Shares	Weighted Average Grant-Date Fair Value
Nonvested December 27, 2014	188,998	\$ 78.91
Granted	103,002	94.10
Vested	(88,901 )	73.59
Forfeited	(8,638 )	80.40
Nonvested January 2, 2016	194,461	89.32

The total intrinsic value of options exercised during 2015, 2014 and 2013 was \$5.0 million, \$9.6 million, and \$15.3 million, respectively. The total fair value of shares vested was \$8.1 million, \$7.6 million, and \$6.5 million for 2015, 2014 and 2013, respectively. The total amount of share-based liabilities paid was \$0.4 million, \$0.3 million and \$0.1 million for 2015, 2014 and 2013, respectively.

The company recognizes compensation cost of all share-based awards as an expense on a straight-line basis over the vesting period of the awards. At January 2, 2016, the unrecognized compensation cost for options, restricted shares and performance shares was \$13.2 million before tax, and will be recognized over a weighted-average period of 1.9 years. Compensation cost included as a component of selling, general and administrative expense for all equity compensation plans discussed above was \$10.7 million, \$9.4 million and \$8.9 million for 2015, 2014 and 2013, respectively. The total income tax benefit recognized in the Consolidated Statements of Net Income was \$3.7 million, \$3.3 million and \$3.2 million for 2015, 2014 and 2013, respectively.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 13. Shareholders' Equity, continued

The company uses the Black-Scholes option valuation model to determine the fair value of awards granted. The weighted average fair value of and related assumptions for options granted are as follows:

	2015	2014	2013
Weighted average fair value of options granted	\$21.99	\$26.25	\$23.90
Assumptions:			
Risk-free interest rate	1.25 %	1.67 %	0.70 %
Expected dividend yield	1.04 %	0.93 %	1.20 %
Expected stock price volatility	28.0 %	33.0 %	45.0 %
Expected life of options (years)	4.6	4.6	5.1

Expected volatilities are based on the historical volatility of the company's stock price. The expected life of options is based on historical data for options granted by the company. The risk-free rates are based on yields available at the time of grant on U.S. Treasury bonds with maturities consistent with the expected life assumption.

*Accumulated Other Comprehensive Income (Loss) (AOCI):* The following table sets forth the changes in the components of AOCI by component for fiscal years 2015, 2014 and 2013 (in thousands):

	Pension liability adjustments (a)	Gain on investments (b)	Foreign currency translation adjustment	Accumulated other comprehensive income (loss)
Balance at December 28, 2013	\$ (17,140 )	\$ 9,393	\$ 28,164	\$ 20,417
2014 activity	(12,475 )	1,398	(30,466 )	(41,543 )
Balance at December 27, 2014	(29,615 )	10,791	(2,302 )	(21,126 )
2015 activity	20,893	793	(46,231 )	(24,545 )
Balance at January 2, 2016	\$ (8,722 )	\$ 11,584	\$ (48,533 )	\$ (45,671 )

(a) Net of tax of \$661, \$12,587, and \$6,549 for 2015, 2014 and 2013, respectively.

(b) Net of tax of \$0, \$0 and \$0 for 2015, 2014 and 2013, respectively.

*Preferred Stock:* The Board of Directors may authorize the issuance of preferred stock from time to time in one or more series with such designations, preferences, qualifications, limitations, restrictions and optional or other special rights as the Board may fix by resolution.

The Board of Directors authorized the repurchase of up to 1,000,000 shares of the company's common stock under a program for the period May 1, 2015 to April 30, 2016. The company repurchased 350,000 of its shares in fiscal 2015 and 650,000 shares remain available for purchase under the initial program as of January 2, 2016.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****14. Income Taxes**

Domestic and foreign income (loss) before income taxes is as follows (in thousands):

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Domestic	\$1,313	\$35,264	\$20,254
Foreign	105,635	96,382	103,982
Income before income taxes	\$106,948	\$131,646	\$124,236

Federal, state and foreign income tax (benefit) expense consists of the following (in thousands):

Current:			
Federal	\$(6,686 )	\$8,003	\$8,265
State	2,078	1,275	2,084
Foreign	17,611	27,438	18,462
Subtotal	13,003	36,716	28,811
Deferred:			
Federal and State	11,330	(1,513 )	3,251
Foreign	149	(2,975 )	3,389
Subtotal	11,479	(4,488 )	6,640
Provision for income taxes	\$24,482	\$32,228	\$35,451

The current federal tax benefit for 2015 includes an \$11.7 million benefit reclassified from AOCI as a result of the company's termination of the U.S. defined benefit pension plan as described in Note 12 of the Notes to Consolidated Financial Statements included in this report.

A reconciliation between income taxes computed on income before income taxes at the federal statutory rate and the provision for income taxes is provided below (in thousands):

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Tax expense at statutory rate of 35%	\$37,432	\$46,076	\$43,481
State and local taxes, net of federal tax benefit	1,907	1,186	1,076

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Foreign income tax rate differential	(19,853)	(14,981)	(15,497)
Capital loss valuation allowance	—	—	6,085
Tax on unremitted earnings	—	—	(349 )
Mexico manufacturing operations restructuring	4,841	—	—
Nondeductible professional fees	1,011	—	—
Other, net	(856 )	(53 )	655
Provision for income taxes	\$24,482	\$32,228	\$35,451

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****14. Income Taxes, continued**

Deferred income taxes are provided for the tax effects of temporary differences between the financial reporting bases and the tax bases of the company's assets and liabilities. Significant components of the company's deferred tax assets and liabilities at January 2, 2016 and December 27, 2014, are as follows (in thousands):

	<b>2015</b>	<b>2014</b>
Deferred tax assets:		
Accrued expenses	\$ 19,738	\$ 27,088
Foreign tax credit carryforwards	1,529	5,299
AMT credit carryforwards	—	167
Accrued restructuring	1,115	124
Capital losses	4,557	4,557
Domestic and foreign net operating loss carryforwards	684	525
Gross deferred tax assets	27,623	37,760
Less: Valuation allowance	(4,557 )	(4,557 )
Total deferred tax assets	23,066	33,203
Deferred tax liabilities:		
Tax depreciation and amortization in excess of book	22,747	21,405
Total deferred tax liabilities	22,747	21,405
Net deferred tax assets	\$ 319	\$ 11,798

The deferred tax asset valuation allowance is related to a U.S. capital loss carryover which is not expected to be realized. The remaining domestic and foreign net operating losses either have no expiration date or are expected to be utilized prior to expiration. The foreign tax credit carryforwards begin to expire in 2019. The company paid income taxes of approximately \$23.3 million, \$26.6 million and \$30.4 million in 2015, 2014 and 2013, respectively.

U.S. income taxes were not provided on a cumulative total of approximately \$367.9 million of undistributed earnings for certain non-U.S. subsidiaries as of January 2, 2016, and accordingly, no deferred tax liability has been established relative to these earnings. The determination of the deferred tax liability associated with the distribution of these earnings is not practicable. The company has three subsidiaries in China on "tax holidays." The tax holidays begin to expire in 2017. The company expects to be granted extensions. Such tax holidays contributed approximately \$2.6 million in tax benefits (\$0.11 per diluted share) during 2015 with similar amounts expected in future years while tax holidays are in effect.





**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****14. Income Taxes, continued**

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of January 2, 2016, December 27, 2014 and December 28, 2013 is as follows (in thousands):

Balance at December 28, 2013	\$ 112
Balance at December 27, 2014	112
Increases/decreases for tax positions taken in the current year	—
Additions for tax positions taken in prior years	—
Settlements	—
Lapses of statute of limitations	—
Other	(10 )
Balance at January 2, 2016	\$ 102

The amount of unrecognized tax benefits at January 2, 2016 was approximately \$0.1 million. Of this total, approximately \$0.1 million represents the amount of tax benefits that, if recognized, would favorably affect the effective income tax rate in future periods. The company expects a decrease in unrecognized tax benefits in the next 12 months of \$0.1 million upon concluding a German tax examination. None of the positions included in unrecognized tax benefits are related to tax positions for which the ultimate deductibility is highly certain, but for which there is uncertainty about the timing of such deductibility. The U.S. federal statute of limitations remains open for 2012 onward. Foreign and U.S. state statute of limitations generally range from three to seven years. During 2015, the company received an examination notice from the Illinois state taxing authority for the 2012 and 2013 tax years as well as the Ohio state taxing authority for the 2012 to 2014 tax years. In February 2016, the company received an examination notice from the Internal Revenue Service for the 2014 tax year. The company is currently under examination in Germany for tax years 2008 through 2010. The company does not expect to recognize a significant amount of additional tax expense as a result of concluding the state, U.S. federal or German tax examinations.

The company recognizes accrued interest and penalties associated with uncertain tax positions as part of income tax expense.

**15. Business Unit Segment Information**

An operating segment is defined as a component of an enterprise that engages in business activities from which it may earn revenues and incur expenses, and about which separate financial information is regularly evaluated by the Chief Operating Decision Maker (“CODM”) in deciding how to allocate resources. The CODM is the company’s President and Chief Executive Officer (“CEO”).

The company reports its operations by the following business unit segments: Electronics, Automotive and Industrial.

*Electronics.* Provides circuit protection components and expertise to leading global manufacturers of a wide range of electronic products including mobile phones, computers, LCD TVs, telecommunications equipment, medical devices, lighting products and white goods. The Electronics business segment has the broadest product offering in the industry including fuses and protectors, positive temperature coefficient (“PTC”) resettable fuses, varistors, polymer electrostatic discharge (“ESD”) suppressors, discrete transient voltage suppression (“TVS”) diodes, TVS diode arrays and protection thyristors, gas discharge tubes, power switching components and fuseholders, blocks and related accessories.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****15. Business Unit Segment Information, continued**

*Automotive.* Provides circuit protection products to the worldwide automotive original equipment manufacturers (“OEM”) and parts distributors of passenger automobiles, trucks, buses and off-road equipment. The company also sells its fuses in the automotive replacement parts market. Products include blade fuses, high current fuses, battery cable protectors and varistors.

*Industrial (formerly Electrical).* Provides circuit protection products for industrial and commercial customers. Products include power fuses and other circuit protection devices that are used in commercial and industrial buildings and large equipment such as HVAC systems, elevators and machine tools.

Each of the operating segments is directly responsible for sales, marketing and research and development. Manufacturing, purchasing, logistics, customer service, finance, information technology and human resources are shared functions that are allocated back to the three operating segments. The CEO allocates resources to and assesses the performance of each operating segment using information about its revenue and operating income (loss), but does not evaluate the operating segments using discrete balance sheet information.

Sales, marketing and research and development expenses are charged directly into each operating segment. All other functions are shared by the operating segments and expenses for these shared functions are allocated to the operating segments and included in the operating results reported below. The company does not report inter-segment revenue because the operating segments do not record it. The company does not allocate interest and other income, interest expense, equity in loss of unconsolidated affiliate, or taxes to operating segments. Although the CEO uses operating income to evaluate the segments, operating costs included in one segment may benefit other segments. Except as discussed above, the accounting policies for segment reporting are the same as for the company as a whole.

The company has provided this business unit segment information for all comparable prior periods. Segment information is summarized as follows (in thousands):

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Net sales			
Electronics	\$405,497	\$410,065	\$367,052
Automotive	339,957	325,415	267,207
Industrial	122,410	116,515	123,594
Total net sales	\$867,864	\$851,995	\$757,853

Depreciation and amortization			
Electronics	\$22,936	\$22,177	\$20,735
Automotive	13,437	14,204	9,928
Industrial	5,268	5,494	3,817
Total depreciation and amortization	\$41,641	\$41,875	\$34,480

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 15. Business Unit Segment Information, continued

*(Table continued from prior page.)*

	2015	2014	2013
Operating income (loss)			
Electronics	\$78,194	\$86,981	\$69,559
Automotive	53,086	45,086	39,170
Industrial	18,094	10,674	24,363
Other <sup>(1)</sup>	(45,217 )	(8,911 )	(3,211 )
Total operating income	104,157	133,830	129,881
Interest expense	4,091	4,903	2,917
Impairment and equity in net loss of unconsolidated affiliate <sup>(2)</sup>	—	—	10,678
Foreign exchange loss (gain)	(1,465 )	3,925	(3,303 )
Other expense (income), net	(5,417 )	(6,644 )	(4,646 )
Income before income taxes	\$106,948	\$131,646	\$124,235

Included in “Other” Operating income (loss) for 2015 are costs related to the transfer of the company’s reed switch manufacturing operations from its Lake Mills, Wisconsin and Suzhou, China locations to the Philippines (\$5.2 (1) million in Cost of sales (“COS”)), acquisition related fees (\$4.6 million included in Selling, general and administrative expenses (“SG&A”)), pension settlement and other costs (\$31.9 million in SG&A), internal legal restructuring costs (\$3.6 million in SG&A) and ((\$0.2 million) of other in SG&A).

Included in “Other” Operating income (loss) for 2014 are acquisition related fees (\$0.4 million included in SG&A), non-cash charges for the sale of inventory that had been stepped-up to fair value at the acquisition date of SymCom (\$2.8 million included in COS (See Note 2)), severance charges (\$2.7 million in COS and \$0.5 million in SG&A), internal legal restructuring costs (\$2.2 million in SG&A) and asset impairments (\$0.2 million in Research and development and \$0.1 million in SG&A).

Included in “Other” Operating income (loss) for 2013 are acquisition related fees (\$1.7 million included in SG&A) and non-cash charges for the sale of inventory that had been stepped-up to fair value at the acquisition date of Hamlin (\$1.5 million included in COS).

<sup>(2)</sup> During the first quarter of 2013, the company recorded approximately \$10.7 million related to the impairment of Shocking Technologies. (See Note 6).

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

The company's significant net sales, long-lived assets and additions to long-lived assets by country for the fiscal years ended 2015, 2014 and 2013 are as follows (in thousands):

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Net sales			
United States	\$344,305	\$313,762	\$274,666
China	193,792	189,191	158,494
Other countries	329,767	349,042	324,693
Total net sales	\$867,864	\$851,995	\$757,853
Long-lived assets			
United States	\$23,965	\$34,179	\$27,294
China	37,241	40,981	45,843
Canada	10,488	12,899	14,429
Other countries	90,874	70,581	62,607
Total long-lived assets	\$162,568	\$158,640	\$150,173

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****15. Business Unit Segment Information, continued**

	<b>2015</b>	<b>2014</b>	<b>2013</b>
Additions to long-lived assets			
United States	\$8,609	\$9,134	\$4,644
China	9,710	7,265	7,864
Canada	506	555	2,280
Other countries	25,194	15,327	20,165
Total additions to long-lived assets	\$44,019	\$32,281	\$34,953

For the year ended January 2, 2016, approximately 60% of the company's net sales were to customers outside the United States (exports and foreign operations) including 22% to China. No single customer accounted for more than 10% of net sales during the last three years.

**16. Lease Commitments**

The company leases certain office and warehouse space as well as certain machinery and equipment under non-cancellable operating leases. Rent expense under these leases was approximately \$11.1 million in 2015, \$8.9 million in 2014 and \$8.9 million in 2013.

Rent expense is recognized on a straight-line basis over the term of the leases. The difference between straight-line basis rent and the amount paid has been recorded as accrued lease obligations. The company also has leases that have lease renewal provisions. As of January 2, 2016, all operating leases outstanding were with third parties. The company did not have any capital leases as of January 2, 2016.

Future minimum payments for all non-cancellable operating leases with initial terms of one year or more at January 2, 2016 are as follows (in thousands):

2016	\$8,886
2017	5,227
2018	3,984

2019	3,358
2020	3,163
2021 and thereafter	10,021
	\$34,639

## 17. Earnings Per Share

As of January 2014, the company no longer had “participating securities” as defined under ASC 260. As such, the company now calculates its earnings per share using the treasury method. All of the previous participating securities that resulted in the company using the two-class method have become fully vested or have otherwise expired.

In 2013, the company calculated its earnings per share using the two-class method which included an earnings allocation formula that determined earnings per share for each class of common stock according to dividends declared and undistributed earnings for the period. Previously, the company’s reported net earnings were reduced by the amount allocated to participating securities to arrive at the earnings allocated to common stock shareholders for purposes of calculating earnings per share under the two-class method.



**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****17. Earnings Per Share, continued**

Under the previous two-class method calculation, the dilutive effect of participating securities was calculated using the more dilutive of the treasury stock or the two-class method. The company previously determined the two-class method to be the more dilutive. As such, the earnings allocated to common stock shareholders in the basic earnings per share calculation was adjusted for the reallocation of undistributed earnings to participating securities to arrive at the earnings allocated to common stock shareholders for calculating the diluted earnings per share.

The following table sets forth the computation of basic and diluted earnings per share under the two-class method:

(In thousands, except per share amounts)	2015	2014	2013
Net income as reported	\$82,466	\$99,418	\$88,784
Less: Distributed earnings available to participating securities	—	—	(35 )
Less: Undistributed earnings available to participating securities	—	—	(16 )
Numerator for basic earnings per share —			
Undistributed and distributed earnings available to common shareholders	\$82,466	\$99,418	\$88,733
Add: Undistributed earnings allocated to participating securities	—	—	16
Less: Undistributed earnings reallocated to participating securities	—	—	(16 )
Numerator for diluted earnings per share —			
Undistributed and distributed earnings available to common shareholders	\$82,466	\$99,418	\$88,733
Denominator for basic earnings per share —			
Weighted-average shares	22,565	22,543	22,315
Effect of dilutive securities:			
Common stock equivalents	154	184	222
Denominator for diluted earnings per share —			
Adjusted for weighted-average shares & assumed conversions	22,719	22,727	22,537
Basic earnings per share	\$3.65	\$4.41	\$3.98
Diluted earnings per share	\$3.63	\$4.37	\$3.94

The following potential shares of common stock attributable to stock options were excluded from the earnings per share calculation because their effect would be anti-dilutive: 113,130 in 2015; 43,693 in 2014; and 96,401 in 2013.



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## 18. Selected Quarterly Financial Data (Unaudited)

The quarterly periods listed in the table below for 2015 are for the 14-weeks ended January 2, 2016 and the 13-weeks ended September 26, 2015, June 27, 2015 and March 28, 2015, respectively. The quarterly periods for 2014 are for the 13-weeks ended December 27, 2014, September 27, 2014, June 28, 2014 and March 29, 2014, respectively.

(In thousands, except per share data)

	2015				2014			
	4Q <sup>a</sup>	3Q <sup>b</sup>	2Q <sup>c</sup>	1Q <sup>d</sup>	4Q <sup>e</sup>	3Q <sup>f</sup>	2Q <sup>g</sup>	1Q <sup>h</sup>
Net sales	\$220,020	\$215,510	\$222,021	\$210,313	\$206,620	\$217,608	\$220,908	\$206,859
Gross profit	82,706	86,182	85,281	76,330	75,559	87,380	82,995	78,494
Operating income	29,854	8,584	36,171	29,548	26,391	40,130	33,719	33,590
Net income	22,463	11,324	28,684	19,995	19,511	29,940	24,578	25,389
Net income per share:								
Basic	\$1.00	\$0.50	\$1.26	\$0.88	\$0.86	\$1.33	\$1.09	\$1.13
Diluted	\$1.00	\$0.50	\$1.26	\$0.88	\$0.86	\$1.32	\$1.08	\$1.12

In the fourth quarter of 2015, the company recorded \$2.1 million related to the company's transfer of its reed switch manufacturing operations from the U.S. and China to the Philippines, (\$0.1) million related to the reorganization of its internal legal structure, \$4.0 million in acquisition costs, (\$0.3) million in pension settlement refunds (See Note 12) and (\$0.3) million in other.

In the third quarter of 2015, the company recorded \$1.2 million related to the reed switch manufacturing transfer as noted above, \$0.9 million related to the company's reorganization of its internal legal structure as noted above, \$0.3 million in acquisition costs, \$30.8 million in pension settlement and wind-up costs (See Note 12) and \$0.1 million in other.

In the second quarter of 2015, the company recorded \$0.9 million related to the reed switch manufacturing transfer as noted above, \$1.7 million related to the company's reorganization of its internal legal structure as noted above, \$0.2 million in acquisition costs, and \$0.7 million in pension wind-up costs.

In the first quarter of 2015, the company recorded \$1.0 million related to the reed switch manufacturing transfer as noted above, \$1.2 million in charges related to the reorganization of its internal legal structure as noted above, \$0.2 million in acquisition costs, and \$0.7 million in pension wind-up costs.

In the fourth quarter of 2014, the company recorded \$2.2 million in charges related to severance and to the company's reorganization of its internal legal structure as noted above. The company also recorded \$0.3 million in acquisition costs and \$0.3 million in impairment costs.

In the third quarter of 2014, the company recorded \$1.1 million in charges related to the company's reorganization of its internal legal structure, as noted above.

In the second quarter of 2014, the company recorded a \$1.4 million non-cash charge related to the step-up of inventory from the SymCom acquisition (See Note 2), \$2.0 million in severance charges and \$0.2 million in

acquisition costs.

In the first quarter of 2014, the company recorded a \$1.4 million non-cash charge related to the step-up of inventory from the SymCom acquisition (See Note 2).

## **19. Subsequent Event**

On November 7, 2015, the company and TE Connectivity Ltd., a Swiss corporation, entered into a stock and asset purchase agreement for \$350.0 million, pursuant to which the company has agreed to acquire TE's circuit protection business. The company expects to close the acquisition by the end of the first quarter of 2016. The company will fund the acquisition with available cash and proceeds from credit facilities.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### ITEM CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND 9. FINANCIAL DISCLOSURE.

None.

### ITEM 9A. CONTROLS AND PROCEDURES.

Section 404 of the Sarbanes-Oxley Act of 2002 requires management to include in this Annual Report on Form 10-K a report on management's assessment of the effectiveness of the company's internal control over financial reporting, as well as an attestation report from the company's independent registered public accounting firm on the effectiveness of the company's internal control over financial reporting.

#### Management's Report on Internal Control over Financial Reporting

The management of Littelfuse is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rule 13a-15(f). The Littelfuse internal control system was designed to provide reasonable assurance to its management and the Board of Directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined effective can provide only reasonable assurance with respect to financial statement preparation and presentation. A material weakness is a deficiency, or a combination of deficiencies, in the internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statement will not be prevented or detected on a timely basis.

Littelfuse management, including the company's principal executive officer and principal financial officer, assessed the effectiveness of the company's internal control over financial reporting as of January 2, 2016, based upon the updated framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in 1992 and updated in May 2013. Based on this assessment, the company's management concluded that, as of January 2, 2016, the company's internal control over financial reporting was effective.

**Changes in Internal Control over Financial Reporting**

There has been no change in the company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the 12 months or fiscal quarter ended January 2, 2016, that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

### **Evaluation of Disclosure Controls and Procedures**

The company maintains disclosure controls and procedures, including a formal disclosure committee, that are designed to ensure that information required to be disclosed in the company's Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to the company's management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of January 2, 2016, the Chief Executive Officer and Chief Financial Officer of the company evaluated the effectiveness of the disclosure controls and procedures of the company and concluded that these disclosure controls and procedures were effective, for the reasons set forth above.

### **ITEM 9B. OTHER INFORMATION.**

None.

**PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.****Executive Officers of the Registrant [ITEM 10 UPDATES PENDING]**

The executive officers of the company are as follows:

<b><u>Name</u></b>	<b><u>Age</u></b>	<b><u>Position</u></b>
Gordon Hunter	64	Chairman of the Board of Directors, President and Chief Executive Officer
David W. Heinzmann	52	Chief Operating Officer
Philip G. Franklin	64	Executive Vice President and Chief Financial Officer
Ryan K. Stafford	48	Executive Vice President and Chief Legal and Human Resources Officer
Meenal A. Sethna	46	Sr. Vice President, Finance
Matthew J. Cole	44	Sr. Vice President and General Manager, Industrial Business Unit
Dieter Roeder	59	Sr. Vice President and General Manager, Automotive Business Unit
Deepak Nayar	56	Sr. Vice President and General Manager, Electronics Business Unit
Ian Highley	52	Sr. Vice President and General Manager, Semiconductor Products and Chief Technology Officer
Michael P. Rutz	44	Sr. Vice President Global Operations
Mary S. Muchoney	70	Corporate Secretary



Officers of Littelfuse are elected by the Board of Directors and serve at the discretion of the Board.

Gordon Hunter was elected as the Chairman of the Board of Directors of the company and President and Chief Executive Officer effective January 1, 2005. Mr. Hunter served as Chief Operating Officer of the company from November 2003 to January 2005. Mr. Hunter has been a member of the Board of Directors of the company since June 2002, where he has served as Chairman of the Technology Committee. Prior to joining Littelfuse, Mr. Hunter was employed with Intel Corporation, where he was Vice President, Intel Communications Group, and General Manager, Optical Products Group, responsible for managing the access and optical communications business segments, from 2002 to 2003. Mr. Hunter was CEO for Calmar Optcom during 2001. From 1997 to 2002, he also served as a Vice President for Raychem Corporation. His experience includes 20 years with Raychem Corporation in the United States and Europe, with responsibilities in sales, marketing, engineering and general management.

David W. Heinzmann, Chief Operating Officer, is responsible for the company's business unit leadership, manufacturing and supply chain groups for all three of the company's business units. Mr. Heinzmann began his career at the company in 1985 and possesses a broad range of experience within the organization. He has held positions as a Manufacturing Manager, Quality Manager, Plant Manager and Product Development Manager. Mr. Heinzmann also served as Director of Global Operations of the Electronics Business Unit from early 2000 through 2003. He served as Vice President and General Manager, Automotive Business Unit, from 2004 through August 2007 and as Vice President, Global Operations from September 2007 until January 2014, when he was promoted to his current position.

Philip G. Franklin, Executive Vice President and Chief Financial Officer, joined the company in 1998 and is responsible for finance and accounting, investor relations, mergers and acquisitions, and information systems. Prior to joining Littelfuse, Mr. Franklin was Vice President and Chief Financial Officer for OmniQuip International, a private equity sponsored roll-up in the construction equipment industry, which he helped take public. Before that, Mr. Franklin served as Chief Financial Officer for both Monarch

### **Executive Officers of the Registrant, continued**

Marking Systems, a subsidiary of Pitney Bowes, and Hill Refrigeration, a company controlled by Sam Zell. Earlier in his career, he worked in a variety of finance and general management positions at FMC Corporation. Mr. Franklin currently serves on the Board of Directors and as chairman of the Audit Committees of TTM Technologies and Tribune Publishing. Mr. Franklin will retire from his position as Executive Vice President and Chief Financial Officer, effective March 31, 2016, and will remain with the company as an employee through July 2016 in an advisory role.

Ryan K. Stafford, Executive Vice President and Chief Legal and Human Resources Officer, leads the company's legal, compliance, internal audit, human resources and corporate marketing and communications functions. Mr. Stafford joined the company's executive team as its first general counsel in January 2007. Prior to joining the company, Mr. Stafford served in a number of roles at Tyco International Ltd., including Vice President of China Operations and Vice President & General Counsel for its Engineered Products & Services business segment. Prior to that he was with the law firm Sulloway & Hollis P.L.L.C.

Meenal A. Sethna, Senior Vice President, Finance, is responsible for the treasury, investor relations and financial planning and analysis for the company. Effective March 31, 2016, Ms. Sethna will become Executive Vice President and Chief Financial Officer of the company. Prior to joining the company in 2015, Ms. Sethna served as Vice President and Corporate Controller of Illinois Tool Works Inc., a global manufacturer of industrial products and equipment, from 2011 to 2015. Prior to that, Ms. Sethna worked for Motorola, Inc. from 2004 through 2010.

Matthew J. Cole, Senior Vice President and General Manager, Industrial Business Unit, is responsible for the electrical fuse, protection relay and custom electrical products businesses of the Industrial Business Unit. Prior to joining the company in 2015, Mr. Cole served as Vice President and General Manager of AMTETEK's Advanced Measurement Technology division, a global leader in electronic instruments and electromechanical devices from 2009 to 2015. Before that, Mr. Cole held positions in general management, marketing and operations at Danaher and Allied Signal/Honeywell.

Dieter Roeder, Senior Vice President and General Manager, Automotive Business Unit, is responsible for marketing, sales, product development and customer relationships for all automotive business reporting units which include passenger car products, automotive sensor products and commercial vehicle products. Mr. Roeder joined the company in 2005 leading the Automotive Business Unit's European sales team, based in Germany, before he was promoted to his current position in August 2007. Prior to joining the company, Mr. Roeder served as Director of Business Development Europe for TDS Automotive from 2002 to 2005. Before that, Mr. Roeder spent 10 years with Raychem GmbH (later Tyco Electronics) where he had various sales and marketing responsibilities within the European automotive industry.

Deepak Nayar, Senior Vice President and General Manager, Electronics Business Unit, is responsible for marketing, sales, product development and customer relationships of the Electronics Business Unit. Mr. Nayar joined the company in 2005 as Business Line Director of the Electronics Business Unit. In July 2007, Mr. Nayar was promoted to Vice President, Global Sales, Electronics Business Unit, before he was promoted to his current position in 2011. Prior to joining the company, Mr. Nayar served as Worldwide Sales Director of Tyco Electronics Power Components Division from 1999 to 2005. Before that, Mr. Nayar served as Director of Business Development, Raychem Electronics OEM Group from 1997 to 1999.

### **Executive Officers of the Registrant, continued**

Ian Highley, Senior Vice President and General Manager, Semiconductor Products and Chief Technology Officer, is responsible for the marketing, sales, product development and strategic planning efforts of the company's semiconductor products in addition to being responsible for the company's overall information technology efforts. Mr. Highley joined the company in 2002 as Product Line Director, Semiconductor Products. Mr. Highley served as General Manager Semiconductor Products from August 2008 to May 2012 and Vice President and General Manager, Semiconductor Products from May 2012 to January 2015. Mr. Highley was promoted to his current position in January 2015.

Michael P. Rutz, Senior Vice President, Global Operations, is responsible for the company's sourcing, supplier development, supply chain, quality and manufacturing engineering services. From February 2014 to January 2015, Mr. Rutz was Vice President Supply Chain & Operational Excellence. From August 2011 until February 2014, Mr. Rutz was Senior Vice President Global Supply Chain at WMS Industries Inc., a Chicago-based manufacturer of equipment and software for the gaming industry. Prior to that, Mr. Rutz served for 16 years, in various positions of increasing responsibility, at Motorola Solutions, Inc., most recently as Vice President of Networks Supply Chain from 2009 until August 2011.

Mary S. Muchoney has served as Corporate Secretary since 1991, after joining Littelfuse in 1977. She is responsible for providing all secretarial and administrative functions for the President and Littelfuse Board of Directors. Ms. Muchoney is a member of the Society of Corporate Secretaries & Governance Professionals.

The information set forth under "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement is incorporated herein by reference. The company maintains a code of conduct, which applies to all employees, executive officers and directors. The company's code of conduct meets the requirements of a "code of ethics" as defined by Item 406 of Regulation S-K and applies to our Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer as well as all other executive officers and employees. The code of conduct is available for public viewing on the company's website at [www.littelfuse.com](http://www.littelfuse.com) under the heading "Investors – Corporate Governance."

If the company makes substantive amendments to the code of conduct or grants any waiver to its Chief Executive Officer, Chief Financial Officer or persons performing similar functions, Littelfuse will disclose the nature of such amendment or waiver on its website or in a Current Report on Form 8-K in accordance with applicable rules and regulations. The information contained on or connected to the company's website is not incorporated by reference into this Form 10-K and should not be considered part of this or any other report Littelfuse files or furnishes with the SEC. There have been no material changes to the procedures by which security holders may recommend nominees to the company's Board of Directors in 2015.



**ITEM 11. EXECUTIVE COMPENSATION.**

The information set forth under “Election of Directors – Compensation of Directors” and “Executive Compensation” in the Proxy Statement is incorporated herein by reference, except the section captioned “Compensation Committee Report” is hereby “furnished” and not “filed” with this Annual Report on Form 10-K.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.**

The information set forth under “Ownership of Littelfuse, Inc. Common Stock” and “Compensation Plan Information” in the Proxy Statement is incorporated herein by reference.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

The information set forth under “Certain Relationships and Related Transactions” and “Election of Directors” in the Proxy Statement is incorporated herein by reference.

**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.**

The information set forth under “Audit and Non-Audit Fees” in the Proxy Statement is incorporated herein by reference.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.**

(a) Financial Statements and Schedules

(1) The following Financial Statements are filed as a part of this report:

(i) Reports of Independent Registered Public Accounting Firms (pages 42-44).

(ii) Consolidated Balance Sheets as of January 2, 2016 and December 27, 2014 (page 45).

(iii) Consolidated Statements of Net Income for the years ended January 2, 2016, December 27, 2014 and December 28, 2013 (page 46).

(iv) Consolidated Statements of Comprehensive Income for the years ended January 2, 2016, December 27, 2014 and December 28, 2013 (page 46).

(v) Consolidated Statements of Cash Flows for the years ended January 2, 2016, December 27, 2014 and December 28, 2013 (page 47).

(vi) Consolidated Statements of Equity for the years ended January 2, 2016, December 27, 2014 and December 28, 2013 (page 48).

(vii) Notes to Consolidated Financial Statements (pages 49-77).

(2) The following Financial Statement Schedule is submitted herewith for the periods indicated therein.

(i) Schedule II - Valuation and Qualifying Accounts and Reserves (page 85).

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and, therefore, have been omitted.

(3) Exhibits. See Exhibit Index on pages 87-91.

**SCHEDULE II****VALUATION AND QUALIFYING ACCOUNTS AND RESERVES**

(In thousands of USD)

Description	Balance at Beginning of Year	Charged to			Balance at End of Year
		Costs and Expenses (1)	Deductions (2)	Other (3)	
Year ended January 2, 2016					
Allowance for losses on accounts receivable	\$ 278	\$ 164	\$ 150	\$27	\$319
Reserves for sales discounts and allowances	\$ 19,140	\$ 81,335	\$ 82,997	\$(310)	\$17,168
Deferred tax valuation allowance	\$ 4,557	\$ —	\$ —	\$ —	\$4,557
Year ended December 27, 2014					
Allowance for losses on accounts receivable	\$ 790	\$ 130	\$ 656	\$ 14	\$278
Reserves for sales discounts and allowances	\$ 16,117	\$ 85,825	\$ 82,568	\$(234)	\$19,140
Deferred tax valuation allowance	\$ 6,250	\$ —	\$ 1,693	\$ —	\$4,557
Year ended December 28, 2013					
Allowance for losses on accounts receivable	\$ 705	\$ 2,289	\$ 2,316	\$ 112	\$790
Reserves for sales discounts and allowances	\$ 12,803	\$ 77,659	\$ 74,432	\$87	\$16,117
Deferred tax valuation allowance	\$ 784	\$ 6,085	\$ 619	\$ —	\$6,250

(1) Includes provision for doubtful accounts, sales returns and sales discounts granted to customers.

(2) Represents uncollectible accounts written off, net of recoveries and credits issued to customers and the write-off of certain deferred tax assets that previously had full valuation allowances.

(3) Represents business acquisitions and foreign currency translation adjustments.



## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Littelfuse, Inc.

By: /s/ Gordon Hunter  
Gordon Hunter,  
Chairman of the Board of Directors,  
President and Chief Executive  
Officer

Date: March 1, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant on March 1, 2016 and in the capacities indicated.

/s/ Gordon Hunter      Chairman of the Board of Directors, President and  
Gordon Hunter      Chief Executive Officer (Principal Executive Officer)

/s/ Tzau-Jin Chung      Director  
Tzau-Jin Chung

/s/ Cary T. Fu      Director  
Cary T. Fu

/s/ Anthony Grillo      Director  
Anthony Grillo

/s/ John E. Major      Director  
John E. Major

/s/ William P. Noglows      Director  
William P. Noglows

/s/ Ronald L. Schubel      Director  
Ronald L. Schubel

/s/ Philip G. Franklin      Executive Vice President and Chief Financial Officer  
Philip G. Franklin      (Principal Financial and Principal Accounting Officer)

## EXHIBIT INDEX

The following documents listed below that have been previously filed with the SEC (1934 Act File No. 0-20388) are incorporated herein by reference:

### Exhibit

No.	Description
2.1+	Stock Purchase Agreement, dated as of April 15, 2013, by and among Littelfuse, Inc. and Key Safety Systems, Inc. (filed as Exhibit 2.1 to the company's Current Report on Form 8-K dated April 15, 2013).
2.2+	Stock and Asset Purchase Agreement, dated November 7, 2015, by and between Littelfuse, Inc. and TE Connectivity Ltd. (filed as Exhibit 2.1 to the company's Current Report on Form 8-K dated November 7, 2015).
3.1	Certificate of Incorporation, as amended to date (filed as Exhibit 3(I) to the company's Form 10-K for the fiscal year ended January 3, 1998).
3.2	Certificate of Designations of Series A Preferred Stock (filed as Exhibit 4.2 to the company's Current Report on Form 8-K dated December 1, 1995).
3.3	Bylaws, as amended to date (filed as Exhibit 3.1 to the company's Quarterly Report on Form 10-Q for the quarterly period ended September 27, 2014).
10.1	Amendment to Non-Qualified Stock Option Agreement and Agreement for Deferred Compensation between Littelfuse, Inc. and Gordon Hunter (filed as Exhibit 10.27 to the company's Form 10-K for the fiscal year ended December 31, 2005).++
10.2	Amended and Restated Employment Agreement dated as of December 31, 2007, between Littelfuse, Inc. and Gordon Hunter (filed as Exhibit 10.1 to the company's Form 10-K for the fiscal year ended December 29, 2007).++
10.3	Amended and Restated Employment Agreement, effective as of January 1, 2014, between Littelfuse, Inc. and Dieter Roeder (filed as Exhibit 10.2 to the company's Quarterly Report on Form 10-Q for the period ended March 29, 2014).++
10.4	Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Gordon Hunter (filed as Exhibit 10.1 to the company's Current Report on Form 8-K dated December 22, 2014).++
10.5	Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Philip G. Franklin (filed as Exhibit 10.2 to the company's Current Report on Form 8-K dated December 22, 2014).++
10.6	

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and David W. Heinzmann (filed as Exhibit 10.3 to the company's Current Report on Form 8-K dated December 22, 2014).++

10.7 Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Dieter Roeder (filed as Exhibit 10.4 to the company's Current Report on Form 8-K dated December 22, 2014).++

10.8 Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Ryan K. Stafford (filed as Exhibit 10.5 to the company's Current Report on Form 8-K dated December 22, 2014).++

10.9 Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Ian Highley (filed as Exhibit 10.9 to the company's Form 10-K for the fiscal year ended December 27, 2014).++

Exhibit	Description
No.	
10.10	Change of Control Agreement effective as of January 1, 2015, between Littelfuse, Inc. and Deepak Nayar (filed as Exhibit 10.9 to the company's Form 10-K for the fiscal year ended December 27, 2014).++
10.11	Change of Control Agreement effective as of February 10, 2014, between Littelfuse, Inc. and Michael Rutz (filed as Exhibit 10.1 to the company's Quarterly Report on Form 10-Q for the period ended March 29, 2014).++
10.12	Change of Control Agreement effective as of February 1, 2016, between Littelfuse, Inc. and Meenal A. Sethna (filed as Exhibit 10.1 to the company's Current Report on Form 8-K dated February 3, 2016).++
10.13*	Change of Control Agreement effective as of May 26, 2015 between Littelfuse, Inc. and Matthew J. Cole.++
10.14*	Summary of Director Compensation.++
10.15*	Amended and Restated Littelfuse, Inc. 401(k) Retirement and Savings Plan.++
10.16	1993 Stock Plan for Employees and Directors of Littelfuse, Inc. as amended (filed as Exhibit 10.1 to the company's Form 10-Q for the quarterly period ended July 2, 2005).++
10.17	Form of Non-Qualified Stock Option Agreement under the 1993 Stock Plan for Employees and Directors of Littelfuse, Inc. for employees of the company (filed as Exhibit 99.1 to the company's Current Report on Form 8-K dated November 8, 2004).++
10.18	Form of Performance Shares Agreement under the 1993 Stock Plan for Employees and Directors of Littelfuse, Inc. (filed as Exhibit 10.23 to the company's Form 10-K for the fiscal year ended January 1, 2005).++
10.19	Form of Non-Qualified Stock Option Agreement under the 1993 Stock Plan for Employees and Directors of Littelfuse, Inc., for non-employee directors of the company (filed as Exhibit 10.24 to the company's Form 10-K for the fiscal year ended January 1, 2005).++
10.20	Stock Plan for New Directors of Littelfuse, Inc., as amended (filed as Exhibit 10.2 to the company's Form 10-Q for the quarterly period ended July 2, 2005).++
10.21	Stock Plan for Employees and Directors of Littelfuse, Inc., as amended (filed as Exhibit 10.3 to the company's Form 10-Q for the quarterly period ended July 2, 2005).++
10.22	Littelfuse, Inc. Equity Incentive Compensation Plan (filed as Exhibit A to the company's Proxy Statement for Annual Meeting of Stockholders held on May 5, 2006).++
10.23	First Amendment to the Littelfuse, Inc. Equity Incentive Compensation Plan dated as of July 28, 2008 (filed as Exhibit 10.2 to the company's Form 10-Q for the quarterly period ended March 28, 2009).++
10.24	

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

Form of Non-Qualified Stock Option Agreement under the Littelfuse, Inc. Equity Incentive Compensation Plan (filed as Exhibit 99.4 to the company's Current Report on Form 8-K dated May 5, 2006).++

- 10.25 Form of Performance Shares Agreement under the Littelfuse, Inc. Equity Incentive Compensation Plan (filed as Exhibit 99.1 to the company's Current Report on Form 8-K dated March 12, 2008).++
- 10.26 Littelfuse, Inc. Outside Directors' Stock Option Plan (filed as Exhibit B to the company's Proxy Statement for Annual Meeting of Stockholders held on May 5, 2006).++
- 10.27 Form of Non-Qualified Stock Option Agreement under the Littelfuse, Inc. Outside Directors Stock Option Plan (filed as Exhibit 99.6 to the company's Current Report on Form 8-K dated May 5, 2006).++

Exhibit	Description
No.	
10.28	Littelfuse, Inc. Outside Directors' Equity Plan (filed as Exhibit A to the company's Proxy Statement for Annual Meeting of Stockholders held on April 27, 2007).++
10.29	First Amendment to the Littelfuse, Inc. Outside Directors' Equity Plan, dated as of July 28, 2008 (filed as Exhibit 10.1 to the company's Form 10-Q for the quarterly period ended March 28, 2009).++
10.30	Form of Stock Option Award Agreement under the Littelfuse, Inc. Outside Directors' Equity Plan (filed as Exhibit 99.3 to the company's Current Report on Form 8-K dated April 25, 2008).++
10.31	Form of Restricted Stock Unit Award Agreement under the Littelfuse, Inc. Outside Directors' Equity Plan (filed as Exhibit 99.4 to the company's Current Report on Form 8-K dated April 25, 2008).++
10.32	Amended and Restated, Littelfuse, Inc. Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10.4 to the company's Form 10-K for the fiscal year ended December 29, 2007).++
10.33	Amended and Restated Littelfuse, Inc. Retirement Plan (filed as Exhibit 10.13 to the company's Form 10-K for the fiscal year ended December 29, 2007).++
10.34	Amendment to Amended and Restated Littelfuse, Inc. Retirement Plan (filed as Exhibit 10.30 to the company's Form 10-K for the fiscal year ended January 2, 2010).++
10.35	Termination of Amendment to the Littelfuse, Inc. Retirement Plan (filed as Exhibit 10.1 to the company's Quarterly Report on Form 10-Q for the quarterly period ended September 27, 2014).
10.36*	Termination of Amended and Restated Littelfuse, Inc. Retirement Plan.++
10.37	Amended and Restated, Littelfuse, Inc. Annual Incentive Plan (filed as Exhibit 10.1 to the company's Form 10-Q for the quarterly period ended April 2, 2010).++
10.38	Form of Restricted Stock Award Agreement under the Littelfuse, Inc. Equity Incentive Compensation Plan (filed as Exhibit 10.1 to the company's Current Report on Form 8-K dated April 28, 2009).++
10.39	Form of Stock Option Award Agreement under the Littelfuse, Inc. Equity Incentive Compensation Plan (filed as Exhibit 10.2 to the company's Current Report on Form 8-K dated April 28, 2009).++
10.40	Littelfuse, Inc. Supplemental Retirement and Savings Plan (filed as Exhibit 10.3 to the company's Current Report on Form 8-K dated October 9, 2009).++
10.41	Fourth Amendment to the Littelfuse, Inc. Supplemental Retirement and Savings Plan (filed as Exhibit 10.1 to the company's Quarterly Report on Form 10-Q for the quarterly period ended September 26, 2015).++
10.42	Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 10.1 to the company's Form 8-K dated May 5, 2010).++

Edgar Filing: LITTELFUSE INC /DE - Form 10-K

- 10.43 First Amendment to the Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 10.36 to the company's Form 10-K for the fiscal year ended December 29, 2012).++
- 10.44 Form of Restricted Stock Unit Award Agreement (Outside Director) under the Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 4.4 to the company's Form S-8 dated May 19, 2010).++
- 10.45 Form of Restricted Stock Unit Award Agreement (Executive) under the Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 10.2 to the company's Quarterly Report on Form 10-Q for the quarterly period ended June 27, 2015).++
- 10.46 Form of Restricted Stock Unit Award Agreement (Tier II Management) under the Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 10.3 to the company's Quarterly Report on Form 10-Q for the quarterly period ended June 27, 2015).++



Exhibit	Description
No.	
10.47	Form of Stock Option Award Agreement under the Littelfuse, Inc. Long-Term Incentive Plan (filed as Exhibit 4.6 to the company's Form S-8 dated May 19, 2010).++
10.48	Credit Agreement, dated as of May 31, 2013, among Littelfuse, Inc., as borrower, JPMorgan Chase Bank, N.A. as Agent, Bank of America, N.A., as Syndication Agent, Wells Fargo Bank, National Association and PNC Bank, National Association, as Co-Documentation Agents, J.P. Morgan Securities LLC, as Sole Bookrunner and Joint Lead Arranger, and Merrill, Lynch, Pierce, Fenner & Smith Incorporated, as Joint Lead Arranger (filed as Exhibit 10.1 to the company's Current Report on Form 8-K dated June 5, 2013).
10.49	Master Increasing Lender Supplement, dated as of January 30, 2014, among Littelfuse, Inc., as borrower, JPMorgan Chase Bank, N.A. as Agent, and each of the banks, financial institutions and other institutional lenders listed on the respective signature pages thereof (filed as Exhibit 10.1 to the company's Current Report on Form 8-K dated February 4, 2014).
10.50	Amendment No. 1, dated as of May 2, 2014, to Credit Agreement, dated as of May 30, 2013, by and among Littelfuse, Inc., as borrower, JPMorgan Chase Bank, N.A. as Agent, and each of the banks, financial institutions listed on the respective signature pages thereof (filed as Exhibit 10.47 to the company's Form 10-K for the fiscal year ended December 27, 2014).
10.51	Amendment No. 2, dated as of January 14, 2015, to Credit Agreement, dated as of May 31, 2013, by and among Littelfuse, Inc., as borrower, JPMorgan Chase Bank, N.A. as Agent, and each of the banks, financial institutions listed on the respective signature pages thereof (filed as Exhibit 10.48 to the company's Form 10-K for the fiscal year ended December 27, 2014).
10.52	Amendment No. 3, dated as of May 4, 2015, to Credit Agreement, dated as of May 31, 2013, by and among Littelfuse, Inc., as borrower, JPMorgan Chase Bank, N.A., as Agent, and each of the banks, financial institutions listed on the respective signature pages thereof (filed as Exhibit 10.1 to the company's Quarterly Report on Form 10-Q for the quarterly period ended June 27, 2015).
14.1	Code of Conduct (filed as Exhibit 14.1 to the company's Current Report on Form 8-K dated October 24, 2008).
21.1*	Subsidiaries.
23.1*	Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of Independent Registered Public Accounting Firm.
31.1*	Rule 13a-14(a)/15d-14(a) certification of Gordon Hunter.
31.2*	Rule 13a-14(a)/15d-14(a) certification of Philip G. Franklin.
32.1+++	Section 1350 certification.

101.INS\* XBRL Instance Document.

101.SCH\* XBRL Taxonomy Extension Schema Document.

101.CAL\* XBRL Taxonomy Extension Calculation Linkbase Document.

101.LAB\* XBRL Taxonomy Extension Label Linkbase Document.

101.PRE\* XBRL Taxonomy Extension Presentation Linkbase Document.

101.DEF\* XBRL Taxonomy Extension Definition Linkbase Document.

Exhibits 10.1 through 10.47 are management contracts or compensatory plans or arrangements.

\* Filed with this Report.

+ Exhibits and schedules omitted pursuant to Item 601(b)(2) of Regulation S-K. Littelfuse agrees to furnish a supplemental copy of an omitted exhibit or schedule to the SEC upon request.

++ Management contract or compensatory plan or arrangement.

+++ Furnished with this Report.