

Dear Fellow Shareholders,

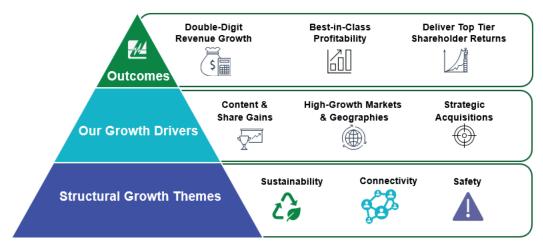
With unprecedented challenges facing the world in 2020, we established a set of priorities for our company that were near-term focused, but have set us up for continued long-term success: first, protect our global associates, their families, and the communities in which we operate; second, meet the critical needs of our customers; and, third, preserve the long-term financial health of our business. While keeping these priorities their primary focus, our dedicated associates around the world worked tirelessly to balance the needs of all of our stakeholders. Through these efforts, we achieved an adjusted EBITDA margin of 21 percent¹, and generated \$202 million in free cash flow², allowing us to emerge from 2020 in a stronger operational and financial position.

Our focused strategies and consistent execution have continued to strengthen our business in a number of areas:

- We have worked hand-in-hand with key customers to develop and launch innovative new marketleading technologies.
- We have expanded the breadth of our product portfolio to better serve our customers.
- We have deepened critical relationships with leading OEMs and channel partners.
- We have continued expanding the markets and geographies that we serve.

We accomplished all of this through a combination of organic efforts and strategic acquisitions. Through these accomplishments, we have established a broader foundation to drive continued profitable growth while delivering significant value to all of our stakeholders. As a result, we have delivered a best-in-class total shareholder return compound annual growth rate of 21 percent³ over the past eight years.

We believe the success of our strategies has placed us in a unique position to continue driving strong growth over the next five years. We introduced our updated 5 year strategy, illustrated in the graphic below, during our February, 2021 virtual investor event, maintaining our commitment to profitable growth.



Our strategy remains rooted in the three structural growth themes of sustainability, connectivity, and safety, that we first identified several years ago. These themes have become more amplified over time and will continue to drive content opportunities and demand for our critical solutions.

- Sustainability includes high-growth applications such as renewable energy, energy storage, electrification, and power optimization
- Connectivity includes high-growth applications like electronification, digital transformation, Industry 4.0, and mobility
- Safety relates to increasing safety standards; and, more electrification means more circuit protection





Our positioning within these structural growth themes translates into key growth drivers for our company. Our customer base is extensive, and we have positioned ourselves to benefit from expanded content and share gains in targeted high-growth applications, markets and geographies. We will also continue to utilize strategic acquisitions that support our efforts to better serve these high-growth opportunities.

As a result, we are confident in our ability to deliver long-term double-digit revenue growth through normal business cycles, while delivering best-in-class profitability and top-tier shareholder returns.

Over recent years, we have created a more balanced and diverse business. Today, approximately one-third of our revenue is derived from each of the industrial, transportation, and electronics end markets we serve, resulting in an addressable market of over \$15 billion⁴. We believe that the diversity of our end markets enables the long-term success of our business, and creates greater opportunities for us.

- Within industrial end markets, our broad product range and deep systems-level technical and design support for customers position us well for continued growth. We are targeting high-growth applications like factory automation and safety, renewable energy, energy storage, and HVAC. We are supplementing our organic growth efforts with acquisitions, such as our recent purchase of Hartland Controls.
- Across transportation end markets, we are extending our leadership based on our reputation for superior product quality, safety, and reliability. We have the technical expertise and robust portfolio to support OEMs, and Tier 1s, and address their electrification and advanced electronics needs. The technology for many passenger and commercial vehicle applications is changing rapidly, including for eMobility and charging infrastructure, and these represent significant content growth opportunities for us
- In electronics end markets, we are leveraging our leadership, broad access and global reach with our
 deep distribution channel and OEM partnerships to win business with more than 100,000 unique
 customers. Our comprehensive product offering, built out through organic investments and key
 acquisitions, is particularly well-suited for high-growth applications such as building technologies and
 automation, appliances, and the overall ecosystem of datacenters and communications infrastructure.

Our customers regularly recognize Littelfuse for our operational and commercial excellence led by our local management teams, which make us their supplier of choice. We are winning with customers based on our application expertise, manufacturing excellence, global presence, lean/six-sigma culture, and digital transformation. Moving forward, these capabilities, and our collaboration across regions, will position us for even better engagement with our key customers to solve their problems and grow our collective business, together.

Finally, we are committed to the long-term value for all stakeholders created by a robust environmental, social, and governance strategy. From an environmental standpoint, sustainability and safety are core to our operational strategies, and our products help enable our customers to meet their sustainability objectives. We believe we have a social responsibility across all of our stakeholders, including the communities in which we live and operate. We strive to drive performance and enrich our culture with diverse people, bold solutions, and sustained success. We also believe we exhibit leading practices in governance and are proud of our diverse and highly-skilled Board of Directors, and robust global ethics and compliance policies and programs.

In closing, thank you for your ongoing support of our company as we continue to execute our growth strategy.

Dave Heinzmann

Dwith

President and Chief Executive Officer



2020 Annual Report

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995 ("PSLRA") - The statements contained in the letter to shareholders and the other sections of this report and in the Company's 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 PSLRA. 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, uncertainties related to political and regulatory changes and other risks that may be detailed in "Item 1A, Risk Factors" in the Form 10-K and in the Company's other Securities and Exchange Commission filings.

A reconciliation of these non-GAAP financial measures to the most directly comparable financial measure calculated and presented in accordance with GAAP is set forth on the following page:

Adjusted EBITDA margin excludes acquisition-related and integration costs, restructuring, impairment and other charges, certain purchase accounting adjustments and amortization and depreciation, as applicable.

2Free cash flow is calculated as cash provided by operating activities less capital expenditures.

Other footnotes:

³Source: Bloomberg.

⁴Company estimate.

LITTELFUSE, INC. GAAP TO NON-GAAP RECONCILIATON (In millions of USD except per share amounts unaudited)

Non-GAAP	adjus	tments -	– (income)/expense
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Tion of a distinction (mostile) expense		
	_	2020
Acquisition-related and integration costs	\$	2.3
Restructuring, impairment and other charges	_	41.7
Non-GAAP adjustments to operating income		44.0
Other expense, net		2.1
Non-operating foreign exchange gain	_	(14.9)
Non-GAAP adjustments to income before income taxes		31.2
Income taxes	_	3.9
Non-GAAP adjustments to net income	\$	27.3
Total EPS impact	\$	1.11
Adjusted operating margin / Adjusted EBITDA margin reconciliation		
		2020
Net sales	\$	1,445.7
GAAP operating income	\$	162.4
Add back Non-GAAP adjustments to operating income		44.0
Adjusted operating income	\$	206.4
Adjusted operating margin		14.3%
Add back amortization		40.0
Add back depreciation		56.1
Adjusted EBITDA	\$	302.5
Adjusted EBITDA margin		20.9%
Free cash flow reconciliation		
		2020
Net cash provided by operating activities	\$	258.0
Less: Purchases of property, plant and equipment		(56.2)
Free cash flow	\$	201.8

NON-GAAP FINANCIAL MEASURES

The information included in the letter to shareholders includes the non-GAAP financial measures of adjusted EBITDA margin and free cash flow. These non-GAAP financial measures exclude the effect of certain expenses and income not related directly to the underlying performance of our fundamental business operations. The company believes that adjusted EBITDA margin provides useful information to investors regarding its operational performance because it enhances an investor's overall understanding of our core financial performance and facilitates comparisons to historical results of operations, by excluding items that are not related directly to the underlying performance of our fundamental business operations or historical business operations. The company believes free cash flow is a useful measure of its ability to generate cash. A reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measures is included herein. The company believes that these non-GAAP financial measures are commonly used by financial analysts and others in the industries in which we operate, and thus further provide useful information to investors. Management additionally uses these measures when assessing the performance of the business and for business planning purposes. Note that our definitions of these non-GAAP financial measures may differ from those terms as defined or used by other companies.

United States Securities and Exchange Commission

Washington, D.C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the fiscal year ended December 26, 2020
Or
Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from to

Commission file number 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)

773-628-1000 (Registrant's telephone number, including area code)

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

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

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 \square No \square

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 \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically, 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 \boxtimes No \square

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

Large accelerated filer	X	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company	

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of 24,339,778 shares of voting stock held by non-affiliates of the registrant was approximately \$3,956,326,119 based on the last reported sale price of the registrant's Common Stock as reported on the NASDAQ Global Select MarketSM on June 27, 2020.

As of February 12, 2021, the registrant had outstanding 24,537,415 shares of Common Stock, net of Treasury Shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Littelfuse, Inc. Proxy Statement for the 2021 Annual Meeting of Stockholders (the "Proxy Statement") are incorporated by reference into Part III of this Form 10-K.

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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"). The Company cautions that forward-looking statements, which speak only as of the date they are made, are subject to risks, uncertainties and other factors, and actual results and outcomes may differ materially from those indicated or implied by the forward-looking statements. These risks, uncertainties and other factors include, but are not limited to, risks and uncertainties relating to general economic conditions; the severity and duration of the coronavirus disease 2019 ("COVID-19") pandemic and the measures taken in response thereto and the effects of those items on the Company's business; 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; uncertainties related to political or regulatory changes; integration of acquisitions may not be achieved in a timely manner, or at all; and other risks that may be detailed in Item 1A. "Risk Factors" below and in the Company's other Securities and Exchange Commission filings.

AVAILABLE INFORMATION

The Company is subject to the reporting and information requirements of the Securities Exchange Act of 1934, as amended and as a result, are obligated to file annual, quarterly, and current reports, proxy statements, and other information with the United States Securities and Exchange Commission ("SEC"). The Company makes these filings available free of charge on its website (http://investor.littelfuse.com) as soon as reasonably practicable after it electronically files them with, or furnish them to, the SEC. Information on the Company's website does not constitute part of this Annual Report on Form 10-K. In addition, the SEC maintains a website (http://www.sec.gov) that contains the Company's annual, quarterly, and current reports, proxy and information statements, and other information the Company electronically files with, or furnishes to, the SEC. The Company's website and the information contained therein or connected thereto are not incorporated into this Annual Report on Form 10-K.

PART I

ITEM 1. BUSINESS.

GENERAL

Littelfuse, Inc., was incorporated under the laws of the State of Delaware in 1991. References herein to the "Company," "we," "our" or "Littelfuse" refer to Littelfuse, Inc. and its subsidiaries. References herein to "2020", "fiscal 2020" or "fiscal year 2020" refer to the fiscal year ended December 26, 2020. References herein to "2019", "fiscal 2019" or "fiscal year 2019" refer to the fiscal year ended December 28, 2019. References herein to "2018", "fiscal 2018" or "fiscal year 2018" refer to the fiscal year ended December 29, 2018. The Company operates on a 52-53 week fiscal year (4-4-5 basis) ending on the Saturday closest to December 31.

OVERVIEW

Founded in 1927, Littelfuse is a global manufacturer of leading technologies in circuit protection, power control and sensing. Serving over 100,000 end customers, the Company's products are found in a variety of transportation, industrial, and electronics end markets. With its broad product portfolio of fuses, semiconductors, polymers, ceramics, relays and sensors, and extensive global infrastructure, the Company's worldwide associates partner with its customers to design, manufacture and deliver innovative, high-quality solutions for a safer, greener and increasingly connected world.

Segments

The Company conducts its business through three reportable segments: Electronics, Automotive, and Industrial. Within these segments, the Company designs, manufactures and sells components and modules for circuit protection, power control and sensing products throughout the world. The circuit protection products protect against electrostatic discharge, power surges, short circuits, voltage spikes and other harmful occurrences; our power control products safely and efficiently control power and improve productivity and our sensor products are used to identify and detect temperature, proximity, flow speed and fluid level in various applications. For segment and geographical information and consolidated net sales and operating income see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 16, Segment Information, of the Notes to Consolidated Financial Statements included in this Annual Report.

- Electronics Segment: Consists of one of the broadest product offerings in the industry, including fuses and fuse accessories, positive temperature coefficient ("PTC") resettable fuses, polymer electrostatic discharge ("ESD") suppressors, varistors, reed switch based magnetic sensing, gas discharge tubes; semiconductor products such as discrete transient voltage suppressor ("TVS") diodes, TVS diode arrays, protection and switching thyristors, metal-oxide-semiconductor field effect transistors ("MOSFETs") and silicon carbide diodes; and insulated gate bipolar transistors ("IGBT") technologies. The segment covers a broad range of end markets, including industrial motor drives and power conversion, automotive electronics, electric vehicle and related infrastructure, power supplies, data centers and telecommunications, medical devices, alternative energy, building and home automation, appliances, and mobile electronics.
- Automotive Segment: Consists of a wide range of circuit protection, power control and sensing technologies for global original equipment manufacturers ("OEMs"), Tier-I suppliers and parts distributors in passenger car, heavy duty truck, off-road vehicles, material handling, agricultural, construction and other commercial vehicle end markets. Passenger car fuse products for internal combustion engine, hybrid and electric vehicles including blade fuses, battery cable protectors, resettable fuses, high-current fuses, and high-voltage fuses. Commercial vehicle products include fuses, switches, relays, and power distribution modules used in applications serving a number of end markets, including heavy truck, construction, agriculture and material handling. Automotive sensor products include a wide range of automotive and commercial vehicle products designed to monitor the passenger compartment occupant's safety and environment as well as the vehicle's powertrain.
- Industrial Segment: Consists of power fuses, protection relays and controls, temperature sensor and other circuit protection products for use in various industrial applications such as oil, gas, mining, renewables and energy storage, electric vehicle infrastructure, non-residential construction, HVAC systems, industrial safety, power conversion, elevators and other industrial equipment.

Strategy

The Company has entered the last year of its current five-year growth strategy which is defined below. As such, the Company will host a virtual investor and analyst event on February 23, 2021 to share the specific details of its new five-year strategic plan, which reinforces the Company's continued commitment to profitable growth building on its achievements from its previous five-year plans.

In December 2016, the Company announced its five-year strategic plan. Building upon its achievements from its previous five-year plan and leveraging the global mega themes of safety, resource efficiency and connectivity, the Company is targeting an average annual accelerated organic growth of 5-7 percent and growth from strategic acquisitions of 5-7 percent. The Company's strategic goals include growing its circuit protection, power control and sensor platforms. The Company expects to do this through content and share gains, targeting underpenetrated geographies and high-growth niche applications, leveraging investments in its people, innovations and operating systems, and capitalizing on growth opportunities where technologies and applications are converging across its segments, while continuing to acquire and integrate businesses that fit its strategic focus areas.

Recent Acquisitions

- Hartland Controls: On January 28, 2021, the Company acquired Hartland Controls, a manufacturer and leading
 supplier of electrical components used primarily in heating, ventilation, air conditioning (HVAC) and other industrial
 and control systems applications with annualized sales of approximately \$70 million. The cash purchase price for
 Hartland Controls was approximately \$113 million and the operations of Hartland Controls will be included in the
 Industrial segment.
- IXYS Corporation: On January 17, 2018, the Company acquired IXYS corporation ("IXYS"), a global pioneer in the power semiconductor and integrated circuit markets with a focus on medium to high voltage power semiconductors across the industrial, communications, consumer and medical markets. IXYS had a broad customer base, serving more than 3,500 customers through its direct sales force and global distribution partners. The purchase price for IXYS was \$856.5 million, which included consideration of cash, Littelfuse common stock, and the value of converted, or cash settled IXYS equity awards. The operations of IXYS are included in the Electronics segment.
- *U.S. Sensor:* On July 7, 2017, the Company acquired the assets of U.S. Sensor Corporation ("U.S. Sensor") for \$24.3 million. U.S. Sensor manufactures a variety of high quality negative temperature coefficient thermistor probes and assemblies. The operations of U.S. Sensor are included in the Electronics segment.

- Monolith Semiconductor Inc.: On February 28, 2017, pursuant to a Securities Purchase Agreement between the Company and the stockholders of Monolith Semiconductor Inc. ("Monolith"), a U.S. start-up Company developing silicon carbide technology, the Company increased its investment in Monolith by acquiring approximately 62% of the outstanding common stock of Monolith for \$15.0 million. During 2018, the Company acquired the remaining outstanding stock of Monolith for \$9.0 million based on Monolith meeting certain technical and sales targets, and now owns 100% of Monolith. The operations of Monolith are currently included in the Industrial segment.
- *ON Portfolio:* On August 29, 2016, the Company acquired certain assets of select businesses (the "ON Portfolio") of ON Semiconductor Corporation for \$104.0 million. The acquired business, which is included in the Electronics segment, consists of a product portfolio that includes transient voltage suppression ("TVS") diodes, switching thyristors, and IGBTs for automotive ignition applications.
- Menber's: On April 4, 2016, the Company completed the acquisition of Menber's S.p.A. ("Menber's") headquartered
 in Legnago, Italy for \$19.2 million (net of cash acquired and after settlement of a working capital adjustment). The
 acquired business is part of the Company's commercial vehicle product business within the Automotive segment and
 specializes in the design, manufacturing, and selling of manual and electrical high current switches and trailer
 connectors for commercial vehicles.
- PolySwitch: On March 25, 2016, the Company acquired 100% of the circuit protection business ("PolySwitch") of TE Connectivity Ltd. for \$348.3 million (net of cash acquired and after settlement of certain post-closing adjustments). The PolySwitch business, which is split between the Automotive and Electronics segments, has a leading position in polymer based resettable circuit protection devices.

Sales and Operations

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

Net sales by segment for the periods indicated are as follows:

	Fiscal Year					
(in millions)		2020		2019		2018
Electronics	\$	937.7	\$	961.1	\$	1,124.3
Automotive		395.8		428.5		479.8
Industrial		112.2		114.3		114.4
Total	\$	1,445.7	\$	1,503.9	\$	1,718.5

Net sales in the Company's three geographic regions, based upon the shipped-to destination, are as follows:

	Fiscal Year							
(in millions)	2020 2019					2018		
Asia-Pacific	\$	670.5	\$	656.8	\$	753.3		
Americas		457.8		508.4		578.6		
Europe		317.4		338.7		386.6		
Total	\$	1,445.7	\$	1,503.9	\$	1,718.5		

The Company's products are sold worldwide through distributors, direct sales forces and manufacturers' representatives in certain regions. For the fiscal year 2020, approximately 73% of the Company's net sales were to customers outside the United States ("U.S."), including approximately 30% 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 IATF 16949 and ISO 14001.

Additional information regarding the Company's sales by geographic area and long-lived assets in different geographic areas is in Note 16, *Segment Information*, of the Notes to Consolidated Financial Statements included in this Annual Report.

BUSINESS ENVIRONMENT

Electronics Segment

The Company designs, develops and manufactures a wide range of components and modules that provide circuit protection, power control and sensing for a multitude of electronic, transportation and industrial applications. Circuit protection technologies in the Electronics Segment are designed to protect against harmful occurrences like voltage spikes, short circuits, power surges and electrostatic discharge. Products include fuses and fuse accessories, PTC resettable fuses, ESD suppressors, varistors, gas discharge tubes, semiconductor products such as discrete TVS diodes, TVS diode arrays, protection and switching thyristors, MOSFETs and silicon carbide diodes; and IGBT technologies.

The Company also offers a wide range of power control products used to convert and regulate energy and safely and efficiently control power across a broad spectrum of industrial applications like renewable energy and storage, motor drives and power conversion. Products include a comprehensive portfolio of semiconductor components and modules including thyristors, MOSFETs, rectifiers and fast recovery diodes, IGBTs and wide band gap devices. The 2018 acquisition of IXYS expanded the Company's power semiconductor portfolio in medium and high-power applications and technology expertise. The Company expects to continue to diversify and expand its presence within industrial electronics markets, leveraging the strong IXYS industrial OEM customer base.

As products become increasingly sophisticated, smarter and more connected, the need for complex sensor technologies continues to grow. Sensor products in the Electronics Segment are used in a wide variety of applications including appliances, building and home automation, industrial controls, and commercial vehicles.

Automotive Segment

The Company is a primary supplier of fuses and circuit protection technologies to global automotive OEMs, through sales made to Tier One automotive suppliers, main-fuse box, and wire harness manufacturers that incorporate the fuses into their products, as well as 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.

Circuit protection needs in the automotive space are expected to generate additional content-per-vehicle exceeding global auto production, with the ever-greater sophistication in electrical architecture and safety system, as well as market growth, development, and penetration of hybrid and electric vehicles.

The Company's automotive sensor business includes a wide range of automotive and commercial vehicle products designed to monitor passenger occupants, including comfort and convenience, safety and environment as well as applications in the vehicle's powertrain. Products are primarily sold to Tier One automotive suppliers, primarily for use in passenger car applications.

The Company's commercial vehicle business includes a variety of products including power distribution modules, low and high current switches, relays, battery management products, ignition key switches, and trailer connectors. These products are used in applications serving a number of end markets, including heavy truck, construction, agriculture and material handling. Products are sold directly to a mix of OEMs, Tier One suppliers, aftermarket channels, as well as through general distribution. The Company expects to grow its commercial vehicle business through expanding the end markets and geographies it serves, and by expanding its product portfolio through organic and inorganic investments.

Industrial Segment

The Company designs and sells a broad range of power fuses and holders, protection relays and controls, temperature sensors and other circuit protection products for use in various industrial applications such as oil and gas, mining, renewable and energy storage, electric vehicle and related infrastructure, non-residential construction, HVAC systems, industrial safety, power conversion. These products are used to protect personnel and equipment from excessive currents, over voltages, and electrical shock hazards.

Products are sold through electrical distributors, electronics distribution channel partnerships and directly to OEM's. The Company expects to grow this business through expanding the end markets and geographies it serves, growing its sales through electronics distribution channel partnerships, and expanding its product portfolio through organic and inorganic investments.

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 with primary locations in China, Germany, Italy, Japan, Lithuania, Mexico, Philippines, Taiwan (China), United Kingdom, and the U.S. The Company maintains 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, marketing, and product management personnel with input from customers. The entire product development process usually ranges from a few months to a few years based on the complexity of development, with continuous efforts to reduce the development cycle. During fiscal years 2020, 2019, and 2018, the Company expended \$52.5 million, \$80.0 million, and \$87.3 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.

The Company owns a large portfolio of patents worldwide and new products are continually being developed to replace older products. The Company regularly applies for patent protection on such new products. While, 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.

MANUFACTURING

The Company's manufacturing facilities are in China, Germany, Italy, Japan, Lithuania, Mexico, Philippines, Portugal, the United Kingdom, and the United States. The Company performs the majority of its own fabrication and maintains in-house capabilities for metal stamping, surface mount assembly, plating (silver, nickel, zinc, and oxides) and thermoplastic molding. In addition, the Company fabricates semiconductor wafers for certain applications and maintains in-house capability for epitaxy fabrication, die attach, and wafer probe testing. After sub-components are 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, including safety and reliability, and customer satisfaction. Additionally, the Company utilizes external wafer foundries and subcontracted test and assembly facilities for a portion of its semiconductor business.

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 single source for several heat-resistant plastics and for zinc but has specifically identified capable alternative heat-resistant plastics and zinc sources. All other raw materials are purchased from a number of readily available outside sources.

SALES and MARKETING

The Company goes to market through selling organizations consisting of worldwide direct sales personnel, distribution partners and manufacturers' representatives. The direct sales force closely works with global OEM, Tier One automotive, consulting engineers, and major end customers to design-in and sell all of the Company's products. The distributors provide fulfillment for a majority of customers including those partnered with electronic manufacturing services ("EMS"). The Company has sales offices and direct sales channels in a number of countries around the world.

Electronics Segment

Our Electronics segment products are used across a variety of applications. While certain of our products require less design support for our customers, many of our products are incorporated into applications with complex design technical support requirements. Most Electronics segment products are sold through our direct salesforce or through our channel distribution

partners. The fulfillment of these products is primarily through our broad line distribution partners, including global distributors such as Arrow Electronics, Inc., Future Electronics and TTI, Inc, regional and high service distributors, including Digi-Key and Mouser, as well as directly to OEM's..

Automotive Segment

The Company primarily uses a direct sales force to service all of the major automotive and commercial vehicle OEMs, system suppliers, and Tier One automotive and aftermarket customers globally. In selected areas, the Company also uses distributors to service smaller customers and to provide supply chain fulfillment for certain customers.

The Company also leverages its automotive customer relationships to sell products from the Electronics segment into automotive end markets, primarily to Tier One automotive customers. These revenues are reported in the Electronics segment.

Industrial Segment

The Company markets and sells through direct and indirect worldwide sales representatives. These products are primarily sold via electronic, electrical and industrial distribution channels to various end customers including electrical contractors, factories, municipalities, utilities and OEMs.

CUSTOMERS

The Company directly sells to over 6,000 customers and distributors worldwide. Sales to Arrow Electronics, Inc., which were reported in our Electronics, Automotive and Industrial segments, were 10.4%, 10.7% and 10.7% of consolidated net sales in 2020, 2019, and 2018, respectively. No other single customer accounted for more than 10% of net sales during any of the last three years. During fiscal 2020, 2019, and 2018, net sales to customers outside the U.S. accounted for approximately 73%, 71%, and 70%, respectively, of the Company's total net sales.

CYBERSECURITY

The Company relies on its information technology systems and networks in connection with many of its business activities. Some of these networks and systems are managed directly by the Company, while others are managed by third-party service providers and are not under the Company's day-to-day control. We oversee the services provided by the third-party service providers. We continually evaluate ourselves for appropriate business continuity and disaster recovery planning, with test scenarios that include simulations and penetration tests. Our networks are monitored by intrusion detection services, and our systems and applications are routinely tested for vulnerabilities and are operated with an appropriate patch management program. We employ a skilled IT workforce to implement our cybersecurity programs and to handle specific security responsibilities. Our IT workforce is trained to address security and compliance-related issues as they arise.

COMPETITION

The Company's products compete with similar products of other manufacturers, some of which may have substantially greater financial resources than the Company. In the Electronics segment, the Company's competitors include Eaton Corporation, Bourns Inc., TDK, ON Semiconductor Corporation, Infineon Technologies, STMicroelectronics NV, Semtech Corporation, and Vishay Intertechnology Inc. In the Automotive segment, the Company's competitors include Eaton Corporation, Pacific Engineering, MTA (Meccanotecnica Codognese), CTS Corporation, Amphenol Corporation, Sensata Technologies Holding NV, and TE Connectivity Ltd. In the Industrial segment, the Company's major competitors include Eaton Corporation, GE Multilin, and Mersen. The Company believes that it globally competes on the basis of innovative products, the breadth of its product line, the quality, design and performance of its products based on their reliability, consistency and safety, its technical capabilities and application expertise, and the responsiveness of its customer service.

BACKLOG

The backlog of unfilled orders at December 26, 2020 was approximately \$709.9 million, compared to \$477.6 million at December 28, 2019 with the increase primarily driven by the Electronics and Automotive segments. Substantially all the orders currently in backlog are scheduled for delivery in 2021.

HUMAN CAPITAL MANAGEMENT

A passion for engineering excellence and an innovative spirit have been a part of what it means to work at Littelfuse since our founding in 1927. We hire bright minds who want to make a big impact and are committed to improve the safety, reliability and performance of our customers' products. As our human capital is critical to our success, we strive to make Littelfuse a diverse, inclusive and safe workplace, provide competitive compensation, benefits, and health and wellness programs, offer appropriate training and promote community involvement.

Employee Data

At December 26, 2020, we had approximately 12,200 full-time, part-time and temporary employees; of which 54% are female and 46% are male; and of which 46%, 40% and 14% are located in North America, Asia and Europe, respectively. Approximately 25% of the Company's total workforce was employed under collective bargaining agreements as of December 26, 2020. Overall, the Company has historically maintained satisfactory employee relations and considers employee relations to be good.

Core Values

Littelfuse core values – Customer Focus, Teamwork, Results Driven, Integrity and Innovation – guide conversations, decisions, and interactions for our business. Together, they are the foundation of our working relationships both internally and externally and we ask each of our associates to exemplify these high standards every day.

Diversity and Inclusion

As part of driving sustainable success, we seek out, value and celebrate diversity in every aspect of our work with customers, stakeholders, suppliers and each other. Our commitment to diversity and equity empowers our associates to innovate, deliver bold solutions and drive growth with the multifaceted insight that comes from true community. We believe that when everyone is included, everyone wins.

We recently formed a Diversity, Inclusion and Belonging Council. The focus of the Council is to enhance the diversity across our stakeholders through bold solutions, to drive sustainable success across the company. In addition, we also have a number of employee resource groups, each sponsored by a member of our executive leadership team, that enhance our inclusive and diverse culture. One example is our Women's Initiative Network (WiN). WiN was established to provide a forum to inspire and accelerate associate advancement and development through networking, mentoring, coaching and education.

Health, Safety and Wellness

In response to the COVID-19 pandemic, Littelfuse has prioritized the health and safety of our associates and their families. In an effort to protect the health and safety of our associates, the Company has taken proactive steps in our facilities globally to implement safety procedures including hygiene and disinfection protocols, social distancing, and providing personal protective equipment to associates. Littelfuse also sponsors certain wellness programs designed to help associates achieve physical, emotional, financial and work well-being goals.

Compensation and Benefits

We provide compensation and benefits programs designed to be both competitive and equitable, in order to attract, retain and motivate highly-qualified associates. The components of our compensation program vary by region and employee-type, and include items such as base salary, bonus, and health and wellness programs.

Training and Development

To deliver results for our customers, colleagues and stakeholders, we strive for continuous improvement and operational excellence. An important component of continuous improvement is providing our associates with appropriate training opportunities. Our training programs cover topics including job-skills, enterprise six-sigma, Lean manufacturing, and ethics and compliance. All global associates are required to take our annual Code of Conduct training, which is made available in local languages for our global workforce.

Community Involvement

Littelfuse encourages and sponsors, as appropriate, employees to donate their time and other resources to better the communities in which we have locations and operate. Causes we support include but are not limited to the well-being of people, education, community improvement and environmental stewardship.

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 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 in Germany 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 estimated costs of remediating the shafts. Further information regarding the coal mine liability accrual is provided in Note 1, Summary of Significant Accounting Policies and Other Information, of the Notes to Consolidated Financial Statements included in this Annual Report.

ITEM 1A. RISK FACTORS.

The Company's business, financial condition, and results of operations are subject to various risks and uncertainties, including the risk factors it has identified below. Any of the following risk factors could materially and adversely affect the Company's business, financial condition, or results of operations. These factors are not necessarily listed in order of importance.

1) Operational Risks:

The Company's industry is subject to intense competitive pressures.

The Company operates in markets that are highly competitive. The Company competes on the basis of price, product performance and quality, service, and / or brand name across the industries and markets it serves. Competitive pressures could affect the prices the Company is able to charge its customers or demand for its products.

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

The Company engages in strategic acquisitions and may not realize the anticipated benefits of the acquisitions and / or may encounter difficulties in integrating these businesses.

The Company seeks to grow through strategic acquisitions. In the past, the Company has acquired a number of businesses or companies and additional product lines and assets. The Company intends to continue to expand and diversify its operations with additional future acquisitions.

An acquired business, technology, service or product could under-perform relative to the Company's expectations and the price paid for it, or not perform in accordance with the Company's anticipated timetable. This could cause the Company's financial results to differ from expectations in any given fiscal period, or over the long term. The success of these transactions also depends on the Company's ability to integrate the assets, operations, and personnel associated with these acquisitions. The Company may encounter difficulties in integrating acquisitions with the Company's operations and may not realize the degree or timing of the benefits that are anticipated from an acquisition.

The Company may also discover liabilities or deficiencies associated with the companies or assets it acquires that were not identified in advance, which may result in significant unanticipated costs. The effectiveness of the Company's due diligence review and its 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 acquired or their representatives, as well as the limited amount of time in which acquisitions are executed. In addition, the Company may fail to accurately forecast the financial impact of an acquisition transaction, including tax and accounting charges. Acquisitions may also result in recording of significant additional expenses to the results of operations and recording of substantial intangible assets on the balance sheet upon closing. Any of these factors may adversely affect the Company's financial condition and results of operations.

Disruptions in the Company's manufacturing, supply or distribution chain could result in an adverse impact on results of operations.

The Company sources materials and sells product through various global network channels. A disruption could occur within the Company's manufacturing, distribution or supply chain network. This could include damage or destruction due to various causes including natural disasters or political instability which would cause one or more of these network channels to become non-operational. This could adversely affect the Company's ability to manufacture or deliver its products in a timely manner, impair its ability to meet customer demand for products and result in lost sales or damage to its reputation. Such a disruption could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company may be unable to manufacture and deliver products in a manner that is responsive to its customers' needs.

The end markets for the Company's 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 its existing products obsolete and unmarketable before it can recover any or all of its research, development, and commercialization expenses on capital investments. Furthermore, the life cycles of its products may change and are difficult to estimate.

The Company's future success will depend upon its ability to manufacture and deliver products in a manner that is responsive to its customers' needs. The Company 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 its customers. The Company invests heavily in research and development without knowing tif it will recover these costs. The Company's competitors may develop products or technologies that will render its products non-competitive or obsolete. If it cannot develop and market new products or product enhancements in a timely and cost-effective manner, its business, financial condition and results of operations could be materially adversely affected.

The Company's business may be interrupted by labor disputes or other interruptions of supplies.

A work stoppage could occur at certain Company facilities, most likely as a result of disputes under collective bargaining agreements or in connection with negotiations of new collective bargaining agreements. In addition, the Company 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 its suppliers. A significant work stoppage, or an interruption or shortage of supplies for any reason, if protracted, could substantially adversely affect the Company's business, financial condition and results of operations.

Failure to attract and retain qualified personnel could affect the Company's business results.

The Company's success, both generally and in connection with mergers and acquisitions, depends on the Company's ability to attract, retain, and motivate a highly-skilled and diverse management team and workforce. Failure to ensure that the Company has the depth and breadth of personnel with the necessary skill set and experience could impede its ability to deliver growth objectives and execute the Company's strategy. Competition for qualified employees among companies that rely heavily upon engineering and technology is at times intense, and the loss of qualified employees could hinder the Company's ability to conduct research activities successfully and develop marketable products.

The Company may not be successful protecting its intellectual property.

The Company considers its intellectual property, including patents, trade names, and trademarks, to be of significant value to its business as a whole. The Company's products are manufactured, marketed, and sold under a portfolio of patents, trademarks, licenses, and other forms of intellectual property, some of which expire or are allowed to lapse at various dates in the future. The Company develops and acquires new intellectual property on an ongoing basis and considers all of its intellectual property to be valuable. The Company's policy is to file applications and obtain patents for the great majority of its novel and innovative

new products including product modifications and improvements. Based on the broad scope of its product lines, the Company believes that the loss or expiration of any single intellectual property right would not have a material adverse effect upon its consolidated results of operations, financial position and cash flows; however, multiple losses or expirations could have a material adverse effect upon the Company's consolidated results of operations, financial position and cash flows.

2) Regulatory Risks:

Changes in U.S. and other countries trade policy, including the imposition of tariffs and the resulting consequences, may have a material adverse impact on our business and results of operations.

In the past few years, the U.S. government adopted a new approach to trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements. It also imposed tariffs on certain foreign goods and products. These measures may materially increase costs for goods imported into the United States. This in turn could require us to materially increase prices to our customers which may reduce demand, or, if we do not or are unable to increase prices, could result in lower margins on products sold. Changes in U.S. trade policy have resulted in, and could result in more, U.S. trading partners adopting responsive trade policies making it more difficult or costly for us to export our products to those countries. Additionally, continued geo-political issues may result in customers in China seeking to source products from local suppliers, which could result in lower sales or lost customers.

The Company is exposed to political, economic, and other risks that arise from operating a multinational business.

The Company's customers, suppliers, employees and operations are located in numerous countries around the world, and contribute significantly to its revenues and earnings. Sales to customers outside the U.S. constituted approximately 73% of the Company's net sales in fiscal 2020. Many of the Company's key customers are located outside of U.S. and maintain global operations. Serving a global customer base and remaining competitive in the global marketplace requires the Company to diversify its operations outside the U.S. to capitalize on customer and market opportunities, build a global workforce and maintain a cost efficient structure. In addition, the Company sources a significant amount of raw materials, components and finished goods from third-party suppliers and contract manufacturers. The Company's operating activities are subject to a number of risks generally associated with multi-national 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, including the outbreak of the coronavirus;
- difficulties in staffing and managing multi-national operations; and
- limitations on the Company's ability to enforce legal rights and remedies.

Any of these factors could have a material adverse effect on the Company's consolidated results of operations, financial position and cash flows.

The COVID-19 pandemic could have a material adverse effect on our ability to operate, results of operations, financial condition, liquidity, and capital investments.

The World Health Organization declared the COVID-19 outbreak a pandemic in 2020, and the virus continues to spread in areas where we operate and sell our products. The COVID-19 pandemic and similar situations/circumstances in the future could have a material adverse effect on our ability to operate, results of operations, financial condition, liquidity, and capital investments. Several public health organizations have recommended, and some local governments have implemented, certain measures to slow and limit the transmission of the virus, including travel restrictions, shelter-in-place requirements and social distancing requirements. Such preventive measures, or others we may voluntarily put in place, may have a material adverse effect on our business for an indefinite period of time, such as the potential shut down of certain locations, decreased employee

availability, potential increased vulnerability to cybersecurity incidents, including breaches of information systems security due to widespread remote working arrangements, potential border closures, disruptions to the businesses of our original equipment manufacturers ("OEMs") and channel partners, and others. Our suppliers and customers may also face these and other challenges, which could lead to a disruption in our supply chain as well as decreased demand for our products. These issues may also materially affect our future access to our sources of liquidity, particularly our cash flows from operations, financial condition, capitalization, and capital investments. These disruptions may continue to occur and may result in future impairment, restructuring and other charges. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in the risk factors disclosed in *Part I, Item 1A. Risk Factors*, including those relating to our products and services, financial performance, debt covenant compliance and debt obligations. The ultimate magnitude of COVID-19, including the extent of its impact on our financial and operational results, which could be material, will be determined by the length of time that the pandemic continues, its effect on the demand for our services, as well as the effect of governmental regulations imposed in response to the pandemic. We cannot at this time predict the impact of the COVID-19 pandemic, but it could have a material adverse effect on our business, financial condition, results of operations and/or cash flows.

Environmental liabilities could adversely impact the Company's 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 the Company's manufacturing processes or in its finished goods. These environmental regulations have required the Company to expend a portion of its resources and capital on relevant compliance programs. Under these laws and regulations, the Company could be held financially responsible for remedial measures if its current or former properties are contaminated or if it sends waste to a landfill or recycling facility that becomes contaminated, even if the Company did not cause the contamination. The Company may be subject to additional common law claims if it releases 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 the Company to significant liabilities and could have a material adverse effect on its consolidated results of operations, financial position and cash flows.

In the conduct of manufacturing operations, the Company has handled and does 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, the Company operates or owns 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 the Company 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.

3) Financial Risks:

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

In the past, the Company has taken actions to restructure and optimize its production and manufacturing capabilities and efficiencies through relocations, consolidations, plant closings or asset sales. In the future, the Company may take additional restructuring actions including the consolidating, closing or selling of additional facilities. These actions could result in impairment charges and various charges for such items as idle capacity, disposition costs and severance costs, in addition to normal or attendant risks and uncertainties. The Company may be unsuccessful in any of its current or future efforts to restructure or consolidate its business. 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 the Company's business, financial condition and results of operations.

The Company's ability to manage currency or commodity price fluctuations or supply shortages is limited.

As a resource-intensive manufacturing operation, the Company is exposed to a variety of market and asset risks, including the effects of changes in commodity prices, foreign currency exchange rates, and interest rates. The Company has multiple sources of supply for the majority of its commodity requirements. However, significant shortages that disrupt the supply of raw materials or result in price increases could affect prices the Company charges its customers, its product costs, and the

competitive position of its products and services. The Company monitors and manages these exposures as an integral part of its overall risk management program, which recognizes the unpredictability of markets and seeks to reduce the potentially adverse effects on its results. Nevertheless, changes in currency exchange rates, commodity prices and interest rates cannot always be predicted. In addition, because of intense price competition and the Company's high level of fixed costs, it 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 the Company's results of operations and financial condition. In addition, significant portions of its revenues and earnings are exposed to changes in foreign currency rates. As it operates in multiple foreign currencies, changes in those currencies relative to the U.S. dollar will impact its revenues and expenses. The impact of possible currency devaluation in countries experiencing high inflation rates or significant exchange fluctuations can impact the Company's results and financial guidance. For additional discussion of interest rate, currency or commodity price risk, see Item 7A, *Quantitative and Qualitative Disclosures about Market Risk*.

The Company's effective tax rate could materially increase as a consequence of various factors, including U.S. and/or international tax legislation, mix of the Company's earnings by jurisdiction, and U.S. and non-U.S. jurisdictional tax audits.

The Company is subject to taxes in the U.S. and numerous non-U.S. jurisdictions. Therefore, it is subject to changes in tax laws in each of these jurisdictions. Tax legislative proposals have been mentioned by the new U.S. administration that, if enacted, would raise the U.S. corporate income tax rate and result in increases in the taxable income base of U.S. multinational businesses. Certain European jurisdictions, including Germany and the Netherlands, have enacted or will enact tax legislation based upon directives from the European Union. Such legislation could potentially deny tax deductions for certain expenses and/or subject to tax the income earned in certain low tax jurisdictions. The Company's income tax rate in certain other non-U.S. jurisdictions, including the Philippines, is substantially lower than the U.S. statutory tax rate. Legislative proposals have been made from time to time to reduce the tax benefits in these jurisdictions, in some cases with the tax increase phased in over a multi-year transition period. The Philippines is currently contemplating such legislation, including a relatively long-term transition period. The outcome of these and other legislative developments, including changes to interpretations of recently enacted legislation, could have a material adverse effect on the Company's future effective tax rate and cash flows.

The Organization for Economic Co-operation and Development is working with a group of more than 100 countries to seek agreement to modify the international tax system during 2021 to address the influence of the digital economy. This effort could result in a significant change to the tax treatment of multinational businesses, subjecting them to tax in additional jurisdictions, modifying the methods by which they allocate profits among jurisdictions, and subjecting them to a global or country by country minimum level of tax. The outcome of this effort could have a material adverse effect on the Company's effective tax rate and cash flows.

The Company has two subsidiaries in China which benefit from lower tax rates due to "tax holidays" which apply for three-year periods, subject to extension. The tax holiday for one of these subsidiaries expired at the end of 2020, and it will seek an extension. There can be no assurance that such extensions will be granted.

The tax rates applicable in the jurisdictions within which the Company operates vary widely. Therefore, the Company's effective tax rate may be adversely affected by changes in the mix of its earnings by jurisdiction.

The Company's tax returns are subject to examination by various U.S. and non-U.S. tax authorities, including the U.S. Internal Revenue Service. The Company regularly assesses the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of its provision for income taxes. However, there can be no assurance as to the outcome of these examinations.

A decline in expected profitability of the Company or individual reporting units of the Company could result in the impairment of assets, including goodwill and other long-lived assets.

During 2020, the Company recorded a goodwill impairment charge of \$33.8 million in the automotive sensors reporting unit within the Automotive segment and the Company continues to hold material amounts of goodwill and other long-lived assets on its balance sheet. A decline in expected profitability, particularly if there is a decline in the global economy, could call into question the recoverability of the Company's related goodwill and other long-lived tangible and intangible assets and require the write-down or write-off of these assets. Such an occurrence could have a material adverse effect on the Company's consolidated results of operations, financial position and cash flows.

A significant fluctuation between the U.S. dollar and other currencies could adversely impact the Company's revenue and earnings.

Although the Company's financial results are reported in U.S. dollars, the majority of the Company's operations consist of manufacturing and sales activities in foreign countries. The Company's most significant net long exposure is to the euro. The

Company's most significant net short exposures are to the Chinese renminbi, Mexican peso, and Philippine peso. Changes in foreign exchange rates could have an adverse effect on the Company's results of operations, financial position and cash flows.

The Company's revenues may vary significantly from period to period.

The Company's revenues may vary significantly from one period to another due to a variety of factors including:

- changes in customers' buying decisions;
- changes in demand for its products;
- changes in its distributor inventory stocking;
- the Company's product mix;
- the Company's effectiveness in managing manufacturing processes;
- costs and timing of its component purchases;
- the effectiveness of its inventory control;
- the degree to which it is able to utilize its available manufacturing capacity;
- the Company's ability to meet delivery schedules;
- general economic and industry conditions;
- local conditions and events that may affect its 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 the Company.

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

The inability to maintain access to capital markets may adversely affect the Company's business and financial results.

The Company's ability to invest in its 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 the Company is unable to access the capital markets or bank credit facilities, it could experience a material adverse effect on its consolidated results of operations, financial position and cash flows.

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

The Company's expense levels are based, in part, on its expectations for future sales. Many of the Company's expenses, particularly those relating to capital equipment and manufacturing overhead, are relatively fixed. The Company might not be able to reduce spending quickly enough to compensate for reductions in sales. Accordingly, shortfalls in sales could materially and adversely affect the Company's consolidated results of operations, financial position and cash flows.

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

The market price of the Company's stock can fluctuate widely. Between December 28, 2019 and December 26, 2020, the closing sale price of the Company's common stock ranged between a low of \$103.63 and a high of \$253.70. The volatility of the stock price may be related to any number of factors, such as volatility in the financial markets, general macroeconomic conditions, industry conditions, market expectations concerning the Company's results of operations, or the volatility of its revenues as discussed above under "The Company's Revenues May Vary Significantly from Period to Period." The historic market price of the Company's common stock may not be indicative of future market prices. The Company may not be able to sustain or increase the value of its common stock. Declines in the market price of the Company's stock could adversely affect the Company's 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 the Company's common stock.

The Company is exposed to, and may be adversely affected by, potential security breaches or other disruptions to its information technology systems and data security.

The Company relies on its information technology systems and networks in connection with many of its business activities. Some of these networks and systems are managed directly by the Company, while others are managed by third-party service providers and are not under the Company's direct control. The Company's operations routinely involve receiving, storing, processing and transmitting sensitive information pertaining to its business, customers, dealers, suppliers, employees, and other sensitive matters. As with most companies, the Company has experienced cyber-attacks, attempts to breach its systems, and other similar incidents, none of which have been material. Any future cyber incidents could, however, materially disrupt operational systems; result in loss of trade secrets or other proprietary or competitively sensitive information; compromise personally identifiable information regarding employees or customers or other third parties; and jeopardize the security of the Company's facilities. A cyber incident could be caused by malicious outsiders using sophisticated methods to circumvent firewalls, encryption, and other security defenses. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until they are launched against a target, the Company may be unable to anticipate these techniques or to implement adequate preventative measures. Information technology security threats, including security breaches, computer malware, and other cyber-attacks are increasing in both frequency and sophistication and could create financial liability, subject the Company to legal or regulatory sanctions or damage the Company's reputation with customers, dealers, suppliers, and other stakeholders. The Company continuously seeks to maintain a robust program of information security and controls, but the impact of a material information technology event could have a material adverse effect on the Company's competitive position, reputation, results of operations, financial position and cash flows.

Customer demands and regulations related to conflict-free minerals may force the Company 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, the Company cannot be certain that it will be able to obtain necessary metals in sufficient quantities or at competitive prices. Also, the Company may face challenges with its customers and suppliers if it is unable to sufficiently verify that the metals used in its products are "conflict free."

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

The Company's engineering and research and development, manufacturing, sales, and distribution centers are located in approximately 69 owned or leased facilities worldwide with primary operations in China, Germany, Italy, Japan, Lithuania, Mexico, Netherlands, Philippines, South Korea, United Kingdom, and the U.S. totaling approximately 3.5 million square feet. The Company's owned facilities include approximately 1.8 million square feet and the Company's leased facilities include approximately 1.7 million square feet. The Company's corporate headquarters is located in the U.S. in Chicago, Illinois.

The Company believes its facilities are adequate to meet its requirements for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS.

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

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

Information about our Executive Officers.

The executive officers of the Company are as follows:

Name	Age	Position			
David W. Heinzmann	57	resident and Chief Executive Officer			
Meenal A. Sethna	51	Executive Vice President and Chief Financial Officer			
Ryan K. Stafford	53	Executive Vice President, Chief Legal and Human Resources Officer and Corporate Secretary			
Matthew J. Cole	49	Senior Vice President, eMobility and Corporate Strategy			
Alexander Conrad	55	Senior Vice President and General Manager, Passenger Vehicle Business			
Deepak Nayar	61	Senior Vice President and General Manager, Electronics Business			

David W. Heinzmann, President and Chief Executive Officer and a member of the Board of Directors. Mr. Heinzmann began his career at Littelfuse in 1985 as a manufacturing engineer and has held positions of increasing responsibility since that time, including Vice President, Global Operations, from 2007 to 2014, and Chief Operating Officer from 2014 until assuming his current position in 2017.

Meenal A. Sethna, Executive Vice President and Chief Financial Officer. Ms. Sethna joined Littelfuse in 2015 as Senior Vice President of Finance until assuming her current position in 2016. Prior to joining Littelfuse, Ms. Sethna served from 2011 to 2015 as Vice President and Corporate Controller of Illinois Tool Works Inc., a diversified manufacturer of specialized industrial equipment, consumables, and related service businesses. Ms. Sethna is a Certified Public Accountant in Illinois.

Ryan K. Stafford, Executive Vice President, Chief Legal and Human Resources Officer and Corporate Secretary. Mr. Stafford joined Littelfuse as its first General Counsel in 2007 and became Corporate Secretary in 2017. Prior to joining Littelfuse, 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.

Matthew J. Cole, Senior Vice President, eMobility and Corporate Strategy. Mr. Cole joined Littelfuse in 2015 as Senior Vice President and General Manager, Industrial Business Unit, and in 2019 became Senior Vice President, Business Development and Corporate Strategy until assuming his current position in 2021. Prior to joining Littelfuse, Mr. Cole served from 2009 to 2015 as Vice President and General Manager of the Advanced Measurement Technology division of AMETEK, a global leader in electronic instruments and electromechanical devices.

Alexander Conrad, Senior Vice President and General Manager, Passenger Vehicle Business. Mr. Conrad joined Littelfuse in 2005 as Sales Manager, Germany & Eastern Europe. He then held various positions of increasing responsibility at Littelfuse including Sales Director EMEA; Global Director of Sales; Managing Director, Passenger Car Products from 2013 to 2014; and Vice President, Passenger Car Products, from 2015 until assuming his current position in July 2018.

Deepak Nayar, Senior Vice President and General Manager, Electronics Business. Mr. Nayar joined Littelfuse in 2005 as Business Line Director of the Electronics Business Unit. He then held various positions of increasing responsibility at Littelfuse including Vice President, Global Sales, Electronics Business Unit, and from 2011 until assuming his current position in May 2020, Senior Vice President, Electronics Business Unit.

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 MarketSM.

Number of Holders

As of February 12, 2021, there were 62 holders of record of the Company's common stock.

Dividend Policy

The 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.

Recent Sales of Unregistered Securities

There were no sales of unregistered securities by us or affiliates during the fiscal year ended December 26, 2020.

Purchases of Equity Securities

On April 26, 2019, the Company announced that the Board of Directors authorized to a program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2019 to April 30, 2020 ("2019 program"). On April 29, 2020, the Company announced that the Board of Directors authorized a new program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2020 to April 30, 2021 (the "2020 program") to replace its previous expired 2019 program. During the fiscal year ended December 26, 2020, the Company repurchased 175,110 shares of its common stock totaling \$22.9 million, under the 2019 program. There were 324,890 shares available for purchase under the 2019 program that expired on April 30, 2020.

The Company did not repurchase shares of its common stock during the three months ended December 26, 2020. There are 1,000,000 shares remaining available for purchase under the 2020 program as of December 26, 2020.

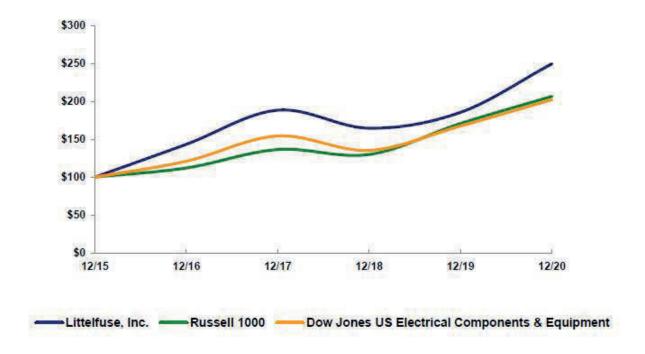
Stock Performance Graph

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 1000 Index and the Dow Jones Electrical Components and Equipment Industry Group Index. The Company believes that the Russell 1000 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.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Littelfuse, Inc., the Russell 1000 Index and the Dow Jones US Electrical Components & Equipment Index



*\$100 invested on 12/31/15 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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	12	/2015	12	/2016	12/	2017	12/	2018	12/	2019	12	/2020
Littelfuse, Inc.	\$	100	\$	143	\$	188	\$	164	\$	185	\$	249
Russell 1000		100		112		136		130		171		206
Dow Jones US Electrical Components & Equipment		100		121		154		135		167		202

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

For Littelfuse, Inc. and all indexes noted above, a \$100 investment made on January 2, 2016 and reinvestment of all dividends 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, 2016, December 30, 2017, December 29, 2018, December 28, 2019, and December 26, 2020 for the fiscal years 2016, 2017, 2018, 2019, and 2020, respectively.

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 Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, and Item 8, *Financial Statements and Supplementary Data*, for the respective years presented:

(in thousands, except per share data)	2020	2019	2018	2017	2016
Net sales	\$ 1,445,695	\$ 1,503,873	\$ 1,718,468	\$ 1,221,534	\$ 1,056,159
Gross profit (1)	501,172	546,295	653,415	506,533	415,835
Operating income	162,372	192,791	225,049	218,511	130,644
Net income	129,986	139,082	164,565	119,519	104,488
Per share of common stock:					
Income from continuing operations					
- Basic	5.33	5.66	6.62	5.27	4.63
- Diluted	5.29	5.60	6.52	5.21	4.60
Cash dividends paid	1.92	1.82	1.60	1.40	1.24
Cash and cash equivalents	687,525	531,139	489,733	429,676	275,124
Total assets	2,747,593	2,559,898	2,614,306	1,740,102	1,491,194
Short-term debt		10,000	10,000	6,250	6,250
Long-term debt, less current portion	687,034	669,158	684,730	489,361	447,892

(1) The prior year gross profit amounts have been reclassified to reflect a change in classification of certain costs presented on the Company's Consolidated Statements of Income. See Note 1, Summary of Significant Accounting Policies and Other Information for further information. This reclassification change had no impact on previously reported operating income and net income amounts.

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

The following discussion of the Company's financial condition and results of operations should be read together with the Consolidated Financial Statements and notes to those statements included in Item 8 of Part II of this Annual Report on Form 10-K.

BUSINESS

For a description of the Company's business, segments and product offerings, see Item 1, Business.

2020 EXECUTIVE OVERVIEW

Net sales decreased by \$58.2 million, or 3.9%, in 2020 compared to 2019. The decrease was primarily driven by production disruptions during the first half of 2020 due to temporary closures of several of the company's manufacturing facilities and reduced demand due to customer shutdowns, resulting from government directives due to the impact of COVID-19. This was partially offset by volume increases across all of the company's businesses in the second half of 2020, led by higher production levels, increased demand from work-from-home and stay-at-home trends, and higher demand in a number of other end markets that the Company sells into, such as passenger vehicles, and \$7.7 million or 0.5% of favorable changes in foreign exchange rates. The Company recognized net income of \$130.0 million, or \$5.29 per diluted share, in 2020 compared to net income of \$139.1 million, or \$5.60 per diluted share in 2019. The decrease in net income is primarily due to the second quarter goodwill impairment charge of \$33.8 million, lower sales in the first half of 2020 driven by COVID-19 production disruptions partially offset by a net increase in foreign exchange gains of \$20.1 million and operating expense cost reductions.

The Company continues to take actions to improve its cost structure. The Company expects to realize cost savings from the restructuring activities taken during 2019 and 2020, including the reorganization of certain research and development, selling and administrative functions across all segments. The Company is also in process of several restructuring activities across its manufacturing and supply chain footprint, including the consolidation of a manufacturing facility within the Industrial Segment, which is expected to be completed in the first half of 2021.

Net cash provided by operating activities was \$258.0 million for the year ended December 26, 2020 as compared to \$245.3 million for the year ended December 28, 2019. The increase in net cash provided by operating activities was primarily due to lower annual incentive payments and reductions in net working capital partially offset by lower earnings largely due to the impact of COVID-19.

On April 3, 2020, the Company amended the Credit Agreement to effect certain changes, including, among others: (i) eliminating the \$200.0 million unsecured term loan credit facility, the remaining outstanding balance (\$140.0 million) of which was repaid in full on April 3, 2020 through the revolving credit facility; (ii) making certain financial and non-financial covenants less restrictive on the Company; (iii) modifying performance-based interest rate margins and undrawn fees; and (iv) extending the maturity date to April 3, 2025. The amended Credit Agreement also allows the Company to increase the size of the revolving credit facility or enter into one or more tranches of term loans if there is no event of default and the Company is in compliance with certain financial covenants. The Company made payments of \$110.0 million on the amended revolving credit facility during the fiscal year ended December 26, 2020. The balance under the facility was \$130.0 million as of December 26, 2020.

On April 7, 2020, the Company entered into a definitive agreement to purchase a group annuity contract, under which an insurance company will be required to directly pay and administer pension payments to certain of the Company's UK pension plan participants, or their designated beneficiaries. The purchase of this group annuity contract will reduce the Company's outstanding pension benefit obligation by approximately \$55 million, representing approximately 37% of the total obligations of the Company's qualified pension plans, and will be funded with pension plan assets and additional cash on hand. In connection with this transaction, the Company will record a one-time non-cash settlement charge in the second half of 2021 currently estimated between \$18 million and \$22 million, reflecting the accelerated recognition of a portion of unamortized actuarial losses in the plan. The actual settlement charge could differ from this estimate due to final data and plan wind-up expenses.

On January 28, 2021, the Company acquired Hartland Controls, a manufacturer and leading supplier of electrical components used primarily in heating, ventilation, air conditioning (HVAC) and other industrial and control systems applications with annualized sales of approximately \$70 million. The cash purchase price for Hartland Controls was approximately \$113 million and the operations of Hartland Controls will be included in the Industrial segment.

Impact of COVID-19 on Business

The Company continued to manage through the COVID-19 impacts throughout the year, with significant improvement to its financial results in the second half of 2020 compared to the first half of 2020. Our manufacturing facilities generally operated at normal capacity levels during the second half of the year as production disruptions were minimal. The effects from COVID-19 are continuing to drive increased costs, from spending on personal protective equipment ("PPE"), additional personnel and employee transportation costs, and manufacturing inefficiencies, as well as an increase in freight costs for our products due to the transportation capacity constraints across the world. This was partially offset during 2020 by the receipt of cash subsidies from international government COVID-19 relief programs.

The Company's priorities continue to be first, on our associates, their families and the communities in which we operate; second, our customers; and third, long-term financial health of the company. In an effort to protect the health and safety of our employees, the Company enacted numerous proactive, aggressive actions at its facilities globally in the first quarter of 2020, and implemented a number of safety procedures including hygiene and disinfection protocols, social distancing and wearing PPE. The Company expects these actions will continue for the foreseeable future.

During 2020, governments around the world enacted various measures in an effort to contain COVID-19 and slow its spread. These measures included orders to close all businesses not deemed "essential", isolate residents to their homes or places of residence, and practice social distancing when engaging in essential activities, which disrupted certain of our operating locations in around the world in the first half of 2020. During the second half of 2020, all of our manufacturing facilities were operational and were generally running at normal capacity levels.

The Company continues to work with customers to meet production requirements for their products, many of which are considered essential, including healthcare and medical devices, transportation, communication and energy infrastructure.

The Company anticipates that the global health crisis caused by COVID-19 may continue to negatively impact its business activity for the foreseeable future. It is currently difficult to estimate the magnitude of the COVID-19 disruption, if future disruptions will occur due to a resurgence in COVID-19 cases and its impact on our employees, customers, suppliers and

vendors. The Company will continue to actively monitor the situation and may take further actions altering our business operations that we determine are in the best interests of our employees, customers, partners, suppliers, and other stakeholders, or as required by federal, state, or local authorities. It is not clear what the potential effects any such alterations or modifications may have on our business and operations, including the effects on our customers, employees, and prospects, or on our financial results for the fiscal year 2021.

OUTLOOK

Vision and Strategy

The Company closely collaborates with its customers to design and manufacture innovative and reliable solutions for a safer, connected, and more sustainable world in virtually every market that uses electrical energy; for example, transportation applications like passenger and commercial vehicles, including eMobility, industrial applications like renewables and energy storage, HVAC and industrial automation and safety, motor drives and power conversion, and electronics applications like data centers and telecommunications, medical devices, home and building automation, appliances, and mobile and consumer electronics. Built upon that framework, the secular growth themes of a safer, connected, and more sustainable world, drive increased product content opportunities.

The Company's strategic plan is focused on increasing shareholder value by driving profitable sales growth, earnings per share growth, strong cash flow generation, and deploying capital to drive value creation. The Company pursues the following major strategic initiatives, which are summarized below, along with more specific areas of focus.

Strategic Objectives	Priorities
Double digit sales growth	 Grow through increased product content with existing customers and increased market share
	 Expand portfolio into new and underpenetrated geographies and end markets
	 Increase innovation capabilities and investments
	 Expand presence in products and applications that are converging across business segments
	Targeted mergers and acquisitions
EPS growth	 Focus on higher profitability growth opportunities
	 Improve operating margins through operational excellence
	Disciplined approach to balancing costs with long-term strategic investments
Cash flow and liquidity	Disciplined management of working capital
	 Deployment of capital consistent with capital allocation priorities
	 Mergers and acquisitions that align with strategy and financial metrics
	 Grow dividend in line with earnings
	Opportunistic share repurchases

The Company's strategy is to generate profitable sales growth. In order to accomplish this, the Company is focusing on accelerating organic growth by increasing its content and share gains, enhancing technology efforts to drive innovation, capitalizing on cross segment opportunities, and gaining traction in underpenetrated geographies and markets. The Company will continue to make targeted strategic acquisitions that align to its strategy and financial metrics to support new business, products, markets, and technologies while leveraging existing customers and targeting new customers.

Management believes that profitable growth through a combination of organic growth and strategic acquisitions is critical to the Company's competitiveness, while enhancing value the Company delivers to all of its stakeholders. In addition, the Company continues to implement initiatives across all platforms to enhance productivity while managing its cost structure to align with business conditions, including integration of operations and streamlining administrative and support activities to drive improved operating margins.

The Company seeks to deploy its capital consistent with capital allocation priorities. Priorities for capital deployment, over time, include investments to drive increased organic growth, targeted acquisitions that align to the Company's strategic and financial metrics and returning capital to shareholders through dividends and opportunistic share repurchases.

The Company has entered the last year of its current five-year growth strategy which is defined below. As such, the Company will host a virtual investor and analyst event on February 23, 2021 to share the specific details of its new five-year strategic plan, which reinforces the Company's continued commitment to profitable growth building on its achievements from its previous five-year plans.

The Company uses several key indicators to gauge progress toward achieving these objectives. These indicators include organic sales growth, operating margins, cash flow from operations and capital expenditures. Through cycles, the Company targets double-digit long-term sales growth, split between 5-7% average annual accelerated organic sales growth and 5-7% average annual accelerated growth from strategic acquisitions, while targeting operating margins between 17% and 19% and double-digit earnings per share growth. Cash flow from operations less capital expenditures is targeted to approximate or exceed net income but in any given year can be significantly impacted by the timing of non-recurring or infrequent expenditures.

Significant Accounting Policies and Critical Estimates

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's most critical accounting policies are those that are most important to the portrayal of its financial condition and results of operations, and which require the Company to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. The Company has identified the following as its most critical accounting policies and judgments. Although management believes that its estimates and assumptions are reasonable, they are based upon information available when they are made, and therefore, actual results may differ from these estimates under different assumptions or conditions. The Company has reviewed these critical accounting policies and related disclosures with the Audit Committee of its Board of Directors. Significant accounting policies are more fully described in the Notes to Consolidated Financial Statements included elsewhere in this Annual Report.

Revenue Recognition

On December 31, 2017, the Company adopted new guidance on revenue from contracts with customers using the modified retrospective method. The adoption did not have a significant impact on the Company's consolidated financial statements.

Revenue Disaggregation

The following table disaggregates the Company's revenue by primary business units for the fiscal years ended December 26, 2020 and December 28, 2019:

	Fiscal Year Ended December 26, 2020)
(in thousands)	Electronics Segment		Automotive Segment		Industrial Segment			Total
Electronics – Semiconductor	\$	522,352	\$	_	\$	_	\$	522,352
Electronics – Passive Products and Sensors		415,410				_		415,410
Passenger Car Products		_	2	200,455		_		200,455
Commercial Vehicle Products			1	01,324		_		101,324
Automotive Sensors		_		93,985		_		93,985
Industrial Products						112,169		112,169
Total	\$	937,762	\$ 3	95,764	\$	112,169	\$	1,445,695

Fiscal Year Ended December 28, 2019

(in thousands)	Electronics Segment		Automotive Segment		Industrial Segment		Total
Electronics – Semiconductor	\$	539,820	\$	_	\$	_	\$ 539,820
Electronics – Passive Products and Sensors		421,260		_		_	421,260
Passenger Car Products		_		218,560		_	218,560
Commercial Vehicle Products				111,972			111,972
Automotive Sensors		_		98,001		_	98,001
Industrial Products				_		114,260	114,260
Total	\$	961,080	\$	428,533	\$	114,260	\$ 1,503,873

During the fourth quarter of 2020, the Company transferred a business previously reported within the Electronics-Semiconductor reporting unit to the Electronics-Passive Products and Sensors reporting units. This transfer aligns with how this business will be managed and is complimentary with existing electronics passive products and sensors and markets into which they sell. The 2019 disaggregated revenue table has been reclassified to reflect this change. This transfer had no impact to the Electronics segment results.

See Note 16, Segment Information, for net sales by segment and countries.

Revenue Recognition

The Company recognizes revenue on product sales in the period in which the Company satisfies its performance obligation and control of the product is transferred to the customer. The Company's sales arrangements with customers are predominately short term in nature and generally provide for transfer of control at the time of shipment as this is the point at which title and risk of loss of the product transfers to the customer. 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 amount of revenue recorded reflects the consideration to which the Company expects to be entitled in exchange for goods and may include adjustments for customer allowance, rebates and price adjustments. The Company's sales channels are primarily through direct sales and independent third-party distributors.

The Company has elected the practical expedient under Accounting Standards Codification ("ASC") 340-40-25-4 to expense commissions when incurred as the amortization period of the commission asset the Company would have otherwise recognized is less than one year.

Revenue and Billing

The Company generally accepts orders from customers through receipt of purchase orders or electronic data interchange based on written sales agreements and purchasing contracts. Contract pricing and selling agreement terms are based on market factors, costs, and competition. Pricing is often 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. As the Company's standard payment terms are less than one year, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component. The Company also elected the practical expedient provided in ASC 606-10-25-18B to treat all product shipping and handling activities as fulfillment activities, and therefore recognize the gross revenue associated with the contract, inclusive of any shipping and handling revenue.

Ship and Debit Program

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 for pricing allowances to reduce its price. When 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, electronic distributor inventory levels 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 certain customers, with prior authorization from the Company's 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 volume-based sales incentives to certain customers to encourage greater product sales. If customers achieve their specific quarterly or annual sales targets, they are entitled to rebates. The Company estimates the projected amount of rebates that will be achieved by the customer and recognizes this estimated cost as a reduction to revenue as products are sold.

Allowance for Doubtful Accounts:

The Company currently measures the expected credit losses based on our historical credit loss experience. The Company has not experienced significant recent or historical credit losses and is not forecasting any significant credit losses which would require adjustments to our methodology. If current conditions and supportable forecasts indicate that our historical loss experience is not reasonable and no longer supportable, the Company may adjust its historical credit loss experience and to reflect these conditions and forecasts. The Company regularly analyzes its significant customer accounts and, when the Company becomes aware of a 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 analyzes 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 historical collection and loss 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 value.

Goodwill

The Company's methodology for allocating the purchase price of acquisitions is based on established valuation techniques that reflect the consideration of a number of factors, including valuations performed by third-party appraisers when appropriate. Goodwill is measured as the excess of the cost of an acquired entity over the fair value assigned to identifiable assets acquired and liabilities assumed. Based on its current organization structure, the Company has seven reporting units for which cash flows are determinable and to which goodwill has been allocated.

The Company annually tests goodwill for impairment on the first day of its fiscal fourth quarter, or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. The Company also performs an interim review for indicators of impairment each quarter to assess whether an interim impairment review is required for any reporting unit. As part of its interim reviews, management analyzes potential changes in the value of individual reporting units based on each reporting unit's operating results for the period compared to expected results as of the prior year's annual impairment test. In addition, management considers how other key assumptions, including discount rates and expected long-term growth rates, used in the last annual impairment test, could be impacted by changes in market conditions and economic events.

During the second quarter of 2020, the Company recorded a non-cash charge of \$33.8 million to recognize the impairment of goodwill in the automotive sensors reporting unit within the Automotive segment. The goodwill impairment charge was due to reductions in the estimated fair value for the automotive sensors reporting unit based on lower expectations for future revenue, profitability and cash flows as compared to the expectations of the 2019 annual goodwill impairment test. These lower future expectations were driven by projected extended declines in end market demand due to the COVID-19 pandemic. In addition,

during the second quarter of 2020, certain customers notified the Company of their decision to delay future programs along with a customer canceling an existing program. As of December 26, 2020, the automotive sensors reporting unit had \$9.8 million of remaining goodwill.

Quantitative Assessment for Impairment

For the seven reporting units with goodwill, the Company compares the estimated fair value of each reporting unit to its carrying value. If the carrying value of a reporting unit exceeds the estimated fair value, the difference between the estimated fair value and carrying value is recorded as the amount of the goodwill impairment charge. The results of the goodwill impairment test as of September 27, 2020 indicated that the estimated fair values for each of the seven reporting units exceeded their respective carrying values. Accordingly, there were no goodwill impairment charges recorded as part of the Company's 2020 annual goodwill impairment test.

As part of its impairment test for these reporting units, the Company engaged a third-party appraisal firm to assist in the Company's determination of the estimated fair values. This determination included estimating the fair value of each reporting unit using both the income and market approaches. The income approach requires management to estimate a number of factors for each reporting unit, including projected operating results, economic projections, anticipated future cash flows, discount rates and the allocation of shared or corporate items. The market approach estimates fair values using comparable marketplace fair value data from within a comparable industry grouping. The Company weighted both the income and market approach equally to estimate the concluded fair value of each reporting unit. The determination of fair value requires the Company to make significant estimates and assumptions, which primarily include, but are not limited to: the selection of appropriate peer group companies; control premiums appropriate for acquisitions in which the Company competes; the discount rate; terminal growth rates; and forecasts of revenue, operating income, depreciation and amortization and capital expenditures.

Goodwill Impairment Assumptions

Although the Company believes its estimates of fair value are reasonable, actual financial results could differ from those estimates due to the inherent uncertainty involved in making such estimates. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on the fair value of the reporting units. Future declines in the overall market value of the Company's equity may also result in a conclusion that the fair value of one or more reporting units has declined below its carrying value.

One measure of the sensitivity of the amount of goodwill impairment charges to key assumptions is the amount by which each reporting unit "passed" (fair value exceeds the carrying value) the goodwill impairment test. All seven of the reporting units passed the goodwill impairment test, with fair values that exceeded the carrying values between 44% and 218% of their respective estimated fair values. As of the most recent annual test conducted on September 27, 2020, the Company noted that the excess of fair value over the carrying value was 218%, 44%, 160%, 137%, 59%, 139%, and 210% for its reporting units: Electronics-Passive Products and Sensors, Electronics-Semiconductor, Passenger Car Products, Commercial Vehicle Products, Automotive Sensors, Relays, and Power Fuse, respectively. Relatively small changes in the Company's key assumptions would not have resulted in any reporting units failing the goodwill impairment test.

Generally, changes in estimates of expected future cash flows would have a similar effect on the estimated fair value of the reporting unit. That is, a 1.0% decrease in estimated annual future cash flows would decrease the estimated fair value of the reporting unit by approximately 1.0%. The estimated long-term net sales growth rate can have a significant impact on the estimated future cash flows, and therefore, the fair value of each reporting unit. A 1.0% decrease in the long-term net sales growth rate would have resulted in no reporting units failing the goodwill impairment test. Of the other key assumptions that impact the estimated fair values, most reporting units have the greatest sensitivity to changes in the estimated discount rate. The estimated discount rate was 10.2% for the Electronics-Passive Products and Sensor and the Electronics-Semiconductor reporting units, 9.2% for the Passenger Car Products and Commercial Vehicle Products reporting units, 11.2% for the Automotive Sensors reporting unit, 12.2% for the Relays reporting unit and 11.2% for the Power Fuse reporting unit. A 1.0% increase in the estimated discount rates would have resulted in no reporting units failing the annual goodwill impairment test. The Company believes that its estimates of future cash flows and discount rates are reasonable, but future changes in the underlying assumptions could differ due to the inherent uncertainty in making such estimates. Additionally, price deterioration or lower volume could have a significant impact on the fair values of the reporting units.

Long-Lived Assets

The Company evaluates the recoverability of other long-lived assets, including property, plant and equipment and certain identifiable intangible assets, whenever events or changes in circumstances indicate that the carrying value of an asset or asset

group may not be recoverable. Factors which could trigger an impairment review include significant underperformance relative to historical or projected operating results, significant changes in the manner of use of the assets or the strategy for the overall business, a significant decrease in the market value of the assets or significant negative industry or economic trends. When the Company determines that the carrying value of long-lived assets may not be recoverable based upon the existence of one or more of the indicators, the assets are assessed for impairment based on the estimated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If the carrying value of an asset exceeds its estimated future undiscounted cash flows, an impairment loss is recorded for the excess of the asset's carrying value over its fair value. During the first quarter of 2020, the Company recognized a \$2.2 million impairment charge related to the land and building associated with the Company's announced consolidation of a manufacturing facility within the Industrial segment. For the year-ended December 28, 2019, the Company recognized non-cash impairment charges of \$0.3 million for certain machinery and equipment related to the closure of a European manufacturing facility in the automotive sensors business within the Automotive segment.

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

The Company records annual income and expense amounts relating to its pension and postretirement benefits plans based on calculations which include various actuarial assumptions including discount rates, expected long-term rates of return and compensation increases. The Company reviews its actuarial assumptions on an annual basis as of the fiscal year-end balance sheet date (or more frequently if a significant event requiring remeasurement occurs) and modifies the assumption based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the Consolidated Balance Sheets but are generally amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive income (loss). The Company believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors. The Company maintains several pension plans in international locations. The expected returns on plan assets and discount rates are determined based on each plan's investment approach, local interest rates and plan participant profiles. The weighted-average discount rates for the Company's defined benefit plans primarily in Europe and the Asia-Pacific regions at December 26, 2020 and December 28, 2019 were 1.2% and 2.3%, respectively.

A 50 basis point change in the discount rates at December 26, 2020 would have the following effect on the projected benefit obligation:

(in millions)	0.5% Increase	0.5% Decrease
Projected benefit obligation	\$ (11.3)	\$ 12.4

On April 7, 2020, the Company entered into a definitive agreement to purchase a group annuity contract, under which an insurance company will be required to directly pay and administer pension payments to certain of the Company's UK pension plan participants, or their designated beneficiaries. The purchase of this group annuity contract will reduce the Company's outstanding pension benefit obligation by approximately \$55 million, representing approximately 37% of the total obligations of the Company's qualified pension plans, and will be funded with pension plan assets and additional cash on hand. In connection with this transaction, the Company will record a one-time non-cash settlement charge in the second half of 2021 currently estimated between \$18 million and \$22 million, reflecting the accelerated recognition of a portion of unamortized actuarial losses in the plan. The actual settlement charge could differ from this estimate due to final data and plan wind-up expenses.

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 for the foreseeable future. The fair value of restricted share units is determined based on the Company's stock price on the grant date reduced by the present value of expected dividends through the vesting period.

Total equity-based compensation expense for all equity compensation plans was \$19.1 million, \$19.9 million, and \$28.2 million in 2020, 2019, and 2018, respectively. Further information regarding this expense is provided in Note 12, *Stock-Based Compensation*, of the Notes to Consolidated Financial Statements included in this Annual Report.

Income Taxes

The Company accounts for income taxes using the asset and 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 and other tax attribute carryforwards (excluding carryforwards where usage has been determined to be remote). 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. U.S. state and non-U.S. income taxes are provided on the portion of non-U.S. income that is expected to be remitted to the U.S. and be taxable (and non-U.S. income taxes are provided on the portion of non-U.S. income that is expected to be remitted to an upper-tier non-U.S. entity). Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Deferred income taxes are not provided on the excess of the investment value for financial reporting over the tax basis of investments in those non-U.S. subsidiaries for which such excess is considered to be permanently reinvested in those operations. Management regularly evaluates whether non-U.S. earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company and its non-U.S. subsidiaries. Changes in economic and business conditions, non-U.S. or U.S. tax laws, or the Company's financial situation could result in changes to these judgments and the need to record additional tax liabilities.

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.

On December 22, 2017, the U.S. enacted legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). Among other things, the Tax Act reduced the U.S. corporate federal income tax rate from 35% to 21%, added base broadening provisions which limit deductions and address excessive international tax planning, imposed a one-time tax (the "Toll Charge") on accumulated earnings of certain non-U.S. subsidiaries and enabled repatriation of earnings of non-U.S. subsidiaries free of U.S. federal income tax.

In the fourth quarter of 2018, within the measurement period outlined in SEC Staff Accounting Bulletin ("SAB") No. 118, the Company finalized its estimates of the impact of the Tax Act and recorded a charge of \$3.2 million, including \$2.3 million for the Toll Charge and \$0.9 million for the net impact of other items. In addition, the Company recorded \$7.0 million for the Toll Charge associated with IXYS as part of the IXYS acquisition purchase price allocation. This was reflected in the opening balance sheet as an increase to goodwill and other long-term liabilities.

One of the base broadening provisions of the Tax Act is the global intangible low-taxed income provisions ("GILTI"). In accordance with guidance issued by the FASB staff, the Company has adopted an accounting policy to treat any GILTI inclusions as a period cost if and when incurred. Thus, for the fiscal years ended December 26, 2020, December 28, 2019, and December 29, 2018, deferred taxes were computed without consideration of the possible future impact of the GILTI provisions, and any current year impact was recorded as a part of the current portion of income tax expense.

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

Off-Balance Sheet Arrangements

The Company does not have off-balance sheet arrangements as defined under SEC rules. 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.

In the financial review that follows, the Company discusses its consolidated results of operations, financial position, cash flows and certain other information. This discussion should be read in conjunction with the Company's Consolidated Financial Statements and related notes.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 26, 2020 AS COMPARED TO THE YEAR ENDED DECEMBER 28, 2019

The fiscal year 2020 included approximately \$44.0 million of non-segment charges, of which \$2.3 million of charges are acquisition-related and integration charges related to the IXYS acquisition and other contemplated acquisitions. In addition, there were \$41.7 million of restructuring, impairment and other charges, primarily related to the goodwill impairment charge of \$33.8 million recorded in the second quarter associated with the automotive sensors reporting unit within the Automotive segment, employee termination costs of \$5.5 million, \$2.2 million of impairment charges recorded in the first quarter associated with the announced consolidation of a manufacturing facility within the Industrial segment and other restructuring charges of \$0.2 million. See Note 8, *Restructuring, Impairment and Other Charges*, for further discussion.

The fiscal year 2019 included approximately \$21.9 million of non-segment charges, of which \$8.9 million of charges are acquisition-related and integration charges primarily related to the IXYS acquisition and other contemplated acquisitions, and \$13.0 million of restructuring charges primarily related to employee termination costs.

Fiscal year 2020 also included approximately \$14.9 million in foreign currency exchange gains primarily attributable to changes in the value of the Euro, Philippine peso, and Chinese renminbi against the U.S. dollar, while fiscal year 2019 included approximately \$5.2 million in foreign currency exchange losses primarily attributable to changes in the value of the Euro, Chinese renminbi, and Japanese yen against the U.S. dollar

	 Fiscal	Yea	ar			
(in thousands, except % change)	2020		2019		Change	% Change
Net sales	\$ 1,445,695	\$	1,503,873	\$	(58,178)	(3.9)%
Cost of sales	944,523		957,578		(13,055)	(1.4)%
Gross profit	501,172		546,295		(45,123)	(8.3)%
Operating expenses	338,800		353,504		(14,704)	(4.2)%
Operating income	162,372		192,791		(30,419)	(15.8)%
Other income, net	(5,083)		(583)		(4,500)	771.9 %
Income before income taxes	161,253		165,884		(4,631)	(2.8)%
Income taxes	31,267		26,802		4,465	16.7 %
Net income	129,986		139,082		(9,096)	(6.5)%

Net Sales

Net sales of \$1,445.7 million decreased \$58.2 million, or 3.9%, for 2020 compared to the prior year primarily due to lower volume in the Automotive and Electronics segments which had net sales decreases of \$32.7 million and \$23.4 million, respectively, partially offset by \$7.7 million or 0.5% of favorable changes in foreign exchange rates. These decreases were primarily driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 and a decline in global auto production driven by the temporary closures of customer manufacturing facilities during the first half of 2020. These sales declines were partially offset by increases in customer demand for consumer devices for work from home needs and strength in various end market demand across all businesses in the second half of the year. All businesses within the Automotive segment experienced lower sales in 2020 due to the production disruptions in the first half of 2020 mentioned above, which was partially offset in the second half of the year, driven by stronger end market demand.

Cost of Sales

Cost of sales was \$944.5 million, or 65.3% of net sales, in 2020, compared to \$957.6 million, or 63.7% of net sales, in 2019. The decrease in cost of sales was primarily due to lower volume in the Electronics and Automotive segments driven by the factors discussed above. As a percent of net sales, cost of sales increased 1.6% driven by higher freight costs of \$5.6 million, additional costs associated with government-directed plant shutdowns and supply chain constraints, supplies and other costs due to the impact of COVID-19, and unfavorable product mix.

Gross Profit

Gross profit was \$501.2 million, or 34.7% of net sales, in 2020, compared to \$546.3 million, or 36.3% of net sales, in 2019. The decrease of \$45.1 million in gross profit reflected lower volume across all segments driven by the disruption across all segments due to temporary closures of manufacturing facilities in the first half of the year resulting from government directives due to the impact of COVID-19. The decrease in gross margin of 1.6% was primarily from the lower volume mentioned previously, unfavorable price and product mix primarily in the Industrial segment. Additionally, higher freight cost of \$5.6 million, costs associated with government-directed plant shutdowns and supply chain constraints, supplies and other costs due to the impact of COVID-19 negatively impacted gross margins.

Operating Expenses

Total operating expenses were \$338.8 million, or 23.4% of net sales, for 2020 compared to \$353.5 million, or 23.5% of net sales, for 2019. The decrease in operating expenses of \$14.7 million is primarily due to lower research and development expenses of \$27.5 million, or 1.7% of net sales, a reduction in discretionary expenses including travel and marketing expenses and a \$6.6 million reduction in acquisition-related and integration charges, partially offset by the second quarter goodwill impairment charge of \$33.8 million, or 2.3% of net sales, in the automotive sensors reporting unit within the Automotive segment and impairment charges of \$2.2 million related to the Company's first quarter announcement to consolidate a manufacturing facility within the Industrial segment.

Operating Income

Operating income for 2020 was \$162.4 million, a decrease of \$30.4 million or 15.8% compared to \$192.8 million for 2019. The decrease in operating income is primarily due to lower gross margin across all segments and the \$33.8 million goodwill impairment charge noted above partially offset by a reduction in operating expenses described above. Operating margins decreased from 12.8% in 2019 to 11.2% in 2020 primarily driven by the factors mentioned above. The second quarter goodwill impairment charge of \$33.8 million negatively impacted the 2020 operating margin by 2.3% which was partially offset by the lower operating expenses and cost reductions noted above.

Income Before Income Taxes

Income before income taxes for 2020 was \$161.3 million, or 11.2% of net sales compared to \$165.9 million, or 11.0% of net sales, for 2019. In addition to the factors impacting comparative results for operating income discussed above, income before income taxes benefited from foreign exchange gains of \$14.9 million during the fiscal year ended December 26, 2020 compared to foreign exchange losses of \$5.2 million during the fiscal year ended December 28, 2019. Additionally, the increase in other income of \$4.5 million was primarily due to the 2019 fiscal year impairment charges of \$7.3 million for certain other investments and a \$2.6 million loss on the disposal of a business within the Electronics segment and \$1.7 million increase in unrealized investment gains associated with our equity investments, partially offset by lower interest income of \$2.0 million and a \$1.2 million increase in coal mining reserves in 2020 versus 2019.

Income Taxes

Income tax expense for 2020 was \$31.3 million, or an effective tax rate of 19.4% compared to income tax expense of \$26.8 million, or an effective tax rate of 16.2% for 2019. The Company's tax rates are lower than the applicable U.S. statutory tax rate primarily due to income earned in lower tax jurisdictions, partially offset by the impact of taxes on unremitted earnings, the GILTI tax provisions, and non-U.S. losses and expenses with no tax benefit. Changes in the amount of these items from year to year impact the effective tax rates. In addition, the 2020 income tax expense included the impact of the goodwill impairment charge of \$33.8 million that was recorded in the second quarter of 2020, the substantial majority of which related to non-U.S. entities and did not result in a tax benefit, and the 2019 income tax expense included a benefit of \$3.3 million from the recognition of previously unrecognized tax benefits (and the reversal of the related accrued interest) due to a lapse in the statute of limitations. The impact of the items discussed above resulted in an increase in the effective tax rate in 2020, as compared to the effective tax rate in 2019. Further information regarding these items is provided in Note 14, *Income Taxes*, of the Notes to Consolidated Financial Statements included in this Annual Report.

Segment Information

The Company reports its operations by the following segments: Electronics, Automotive and Industrial. Segment information is described more fully in Note 16, *Segment Information*, of the Notes to Consolidated Financial Statements included in this Annual Report.

The following table is a summary of the Company's net sales by segment:

	Fiscal Year					
(in millions)		2020 2019			Change	% Change
Electronics	\$	937.7	\$	961.1	\$ (23.4)	(2.4)%
Automotive		395.8		428.5	(32.7)	(7.6)%
Industrial		112.2		114.3	 (2.1)	(1.9)%
Total	\$	1,445.7	\$	1,503.9	\$ (58.2)	(3.9)%

Electronics Segment

Net sales for the Electronics segment decreased \$23.4 million, or 2.4%, in 2020 compared to 2019 primarily due to declines in net sales for the semiconductor and electronics products businesses of \$17.5 million and \$5.9 million, respectively, driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 during the first half of the year. These declines were partially offset by increases in customer demand for consumer devices for work from home needs and strength in various end markets during the second half of the year along with favorable changes in foreign exchange rates of \$3.6 million.

Automotive Segment

Net sales in the Automotive segment decreased \$32.7 million, or 7.6%, in 2020 compared to 2019 due to decreased volume in passenger car products, commercial vehicle products, and automotive sensors businesses of \$18.1 million, \$10.6 million, and \$4.0 million, respectively, driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 and a decline in global auto production driven by the temporary closures of customer manufacturing facilities during the first half of 2020. These sales declines were partially offset by increases in end market demand across all businesses in the second half of 2020 and favorable changes in foreign exchange rates of \$4.1 million.

Industrial Segment

The Industrial segment net sales decreased slightly by \$2.1 million, or 1.9%, in 2020 compared to 2019 primarily due to decreased volume across all businesses driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 in the first half of 2020, partially offset by the transfer of the temperature sensor product line in the third quarter of 2020 previously reported in the Electronics segment.

Geographic Net Sales Information

Net sales by geography represent net sales to customer or distributor locations. The following table is a summary of the Company's net sales by geography:

	Fiscal Year						
(in millions)	2020 2019				Change	% Change	
Asia-Pacific	\$	670.5	\$	656.8	\$	13.7	2.1 %
Americas		457.8		508.4		(50.6)	(10.0)%
Europe		317.4		338.7		(21.3)	(6.3)%
Total	\$	1,445.7	\$	1,503.9	\$	(58.2)	(3.9)%

Asia-Pacific

Asia-Pacific net sales increased \$13.7 million, or 2.1%, in 2020 compared to 2019. The increase in net sales was primarily due to higher volume in the semiconductor business within the Electronics segment and favorable changes in foreign exchange rates of \$2.2 million, partially offset by lower volume in the passenger car products business within the Automotive segment due to the production disruption associated with temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 in the first half of 2020.

Americas

Net sales in the Americas decreased \$50.6 million, or 10.0%, in 2020 compared to 2019 primarily due to lower volume across all segments driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19, the temporary closures of customer manufacturing facilities during the first half of 2020 and unfavorable changes in foreign exchange rates of \$0.3 million. These sales declines were partially offset by increases in end market demand across all businesses in the second half of the year.

Europe

European net sales decreased \$21.3 million, or 6.3%, in 2020 compared to 2019. The decrease in net sales was primarily due to lower volume in the semiconductor business within the Electronics segment, lower volume in passenger car products and commercial vehicle products businesses within the Automotive segment driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19 and the temporary closures of customer manufacturing facilities during the first half of 2020, partially offset by increased volume in the second half of 2020 due to higher end market demand in Electronics and Automotive businesses and favorable changes in foreign exchange rates of \$5.8 million.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 28, 2019 AS COMPARED TO THE YEAR ENDED DECEMBER 29, 2018

The fiscal year 2019 included approximately \$21.9 million of non-segment charges, of which \$8.9 million of charges are acquisition-related and integration charges primarily related to the IXYS acquisition and other contemplated acquisitions, and \$13.0 million of restructuring charges primarily related to employee termination costs. See Note 8, Restructuring, Impairment and Other Charges, for further discussion.

The fiscal year 2018 included approximately \$88.7 million of non-segment charges, of which \$82.9 million of charges are primarily related to the IXYS acquisition as described in Note 2, Acquisitions and Dispositions, of the Notes to Consolidated Financial Statements included in this Annual Report. These charges include \$36.9 million of purchase accounting inventory step-up charges, \$18.7 million in acquisition-related and integration costs primarily related to legal, accounting and other expenses, \$12.4 million in backlog amortization costs, \$8.3 million of employee termination costs and other restructuring charges, \$4.5 million of stock compensation expense recognized immediately upon close for converted IXYS options related to prior service periods, and \$2.1 million change in control expense related to IXYS. In addition, there were \$5.8 million of employee termination costs, impairment and other restructuring charges and acquisition-related expenses for other contemplated acquisitions, which included charges associated with the exit of the Custom business in the second quarter within the Industrial segment.

Fiscal year 2019 also included approximately \$5.2 million in foreign currency exchange losses primarily attributable to changes in the value of the euro, Chinese renminbi, and Japanese Yen against the U.S. dollar, while fiscal year 2018 also included approximately \$0.9 million in foreign currency exchange gains primarily attributable to changes in the value of the euro, Mexico peso, Philippine peso and Chinese renminbi against the U.S. dollar.

	Fiscal Year						
(in thousands, except % change)		2019		2018		Change	% Change
Net sales	\$	1,503,873	\$	1,718,468	\$	(214,595)	(12.5)%
Cost of sales		957,578		1,065,053		(107,475)	(10.1)%
Gross profit		546,295		653,415		(107,120)	(16.4)%
Operating expenses		353,504		428,366		(74,862)	(17.5)%
Operating income		192,791		225,049		(32,258)	(14.3)%
Other income, net		(583)		(1,599)		1,016	(63.5)%
Income before income taxes		165,884		204,942		(39,058)	(19.1)%
Income taxes		26,802		40,377		(13,575)	(33.6)%
Net income		139,082		164,565		(25,483)	(15.5)%

Net Sales

Net sales for 2019 of \$1,503.9 million decreased \$214.6 million, or 12.5%, compared to the prior year primarily due to lower volume across the Electronics and Automotive segments driven by electronics distribution partners and end customers reducing excess inventories, a decline in global auto production and a decline in global end market demand, and \$25.0 million or 1.5% of unfavorable changes in foreign exchange rates.

Cost of Sales

Cost of sales was \$957.6 million, or 63.7% of net sales, in 2019, compared to \$1,065.0 million, or 62.0% of net sales, in 2018. The \$107.5 million decrease in cost of sales is primarily due to lower volume across the Electronics and Automotive segments driven by electronics distribution partners and end customers reducing excess inventories, a decline in global auto production and global end market demand. As a percent of net sales, cost of sales increased 1.7 percentage points driven by unfavorable expense leverage associated with the lower net sales in Electronics and Automotive segments.

Gross Profit

Gross profit was \$546.3 million, or 36.3% of net sales, in 2019, compared to \$653.4 million, or 38.0% of net sales, in 2018. The decrease in gross profit is primarily due to lower volumes across the Electronics and Automotive segments driven by

electronics distribution partners and end customers reducing excess inventories, a decline in global auto production and a decline in global end market demand, unfavorable price and product mix. In 2018 the IXYS purchase accounting inventory step-up charge of \$36.9 million negatively impacted the 2018 gross margin by 2.1%.

Operating Expenses

Total operating expenses were \$353.5 million, or 23.5% of net sales, for 2019 compared to \$428.4 million, or 24.9% of net sales, for 2018. The decrease in operating expenses of \$78.8 million was primarily due to lower annual incentive compensation expenses, reduced backlog amortization expense of \$12.4 million, lower acquisition-related and integration costs of \$11.3 million, global cost saving initiatives, and \$4.5 million stock compensation expense and \$2.1 million of change in control expense related to the 2018 IXYS acquisition.

Operating Income

Operating income for 2019 was \$192.8 million, a decrease of \$32.3 million or 14.3% compared to \$225.0 million for 2018. The decrease in operating income is primarily due to lower gross profit across the Electronics and Automotive segments, partially offset by lower operating expenses noted above and the \$36.9 million purchase accounting inventory step-up charges in 2018. Operating margins decreased from 13.1% in 2018 to 12.8% in 2019 primarily driven by lower gross profit margin discussed above.

Income Before Income Taxes

Income before income taxes for 2019 was \$165.9 million, or 11.0% of net sales compared to \$204.9 million, or 11.9% of net sales, for 2018. In addition to the factors impacting comparative results for operating income discussed above, income before income taxes was unfavorably impacted by foreign exchange losses of \$5.2 million during the fiscal year ended December 28, 2019 compared to foreign exchange gains of \$0.9 million during the fiscal year ended December 29, 2018, and decreases of \$1.0 million in other income primarily due to the impairment charges of \$7.3 million for certain other investments and a \$2.6 million loss on the disposal of a business within the Electronics segment during the fiscal year 2019, partially offset by unrealized investment gains associated with our equity investments and higher interest income.

Income Taxes

Income tax expense for 2019 was \$26.8 million, or an effective tax rate of 16.2% compared to income tax expense of \$40.4 million, or an effective tax rate of 19.7%, for 2018. The 2019 income tax expense includes a benefit of \$3.3 million from the recognition of previously unrecognized tax benefits (and the reversal of the related accrued interest) due to a lapse in the statute of limitations. The 2018 income tax expense includes a charge of \$3.2 million associated with finalizing the 2017 provisional reasonable estimate, including \$2.3 million for the Toll Charge and \$0.9 million for the net impact of other items. Additionally, our tax rates are lower than the applicable U.S. statutory tax rate primarily due to income earned in lower tax jurisdictions, partially offset by the impact of taxes on unremitted earnings, the GILTI tax provisions and non-U.S. losses and expenses with no tax benefit.

Segment Information

The Company reports its operations by the following segments: Electronics, Automotive and Industrial. Segment information is described more fully in Note 16, Segment Information, of the Notes to Consolidated Financial Statements included in this Annual Report.

The following table is a summary of the Company's net sales by segment:

	Fiscal Year					
(in millions)		2019		2018	Change	% Change
Electronics	\$	961.1	\$	1,124.3	\$ (163.2)	(14.5)%
Automotive		428.5		479.8	(51.3)	(10.7)%
Industrial		114.3		114.4	(0.1)	(0.1)%
Total	\$	1,503.9	\$	1,718.5	\$ (214.6)	(12.5)%

Electronics Segment

The Electronics segment net sales decreased \$163.2 million, or 14.5%, in 2019 compared to 2018 primarily due to lower volume across all businesses due to electronics distribution partners and end customer reducing excess inventories, a decline in global end market demand, and unfavorable changes in foreign exchange rates of \$13.5 million.

Automotive Segment

Net sales in the Automotive segment decreased \$51.3 million, or 10.7%, in 2019 compared to 2018 due to lower volume across all businesses primarily from a decline in global auto production, declines in commercial vehicle end market demand, and unfavorable changes in foreign exchange rates of \$10.9 million.

Industrial Segment

The Industrial segment net sales decreased slightly by \$0.1 million, or 0.1%, in 2019 compared to 2018 primarily due to the exit of the Custom business during the second quarter of 2018 and unfavorable changes in foreign exchange rates of \$0.6 million, partially offset by higher volume across all businesses..

Geographic Net Sales Information

Net sales by geography represent net sales to customer or distributor locations. The following table is a summary of the Company's net sales by geography:

	Fiscal	Yea	ar		
(in millions)	2019		2018	Change	% Change
Asia-Pacific	\$ 656.8	\$	753.3	\$ (96.5)	(12.8)%
Americas	508.4		578.6	(70.2)	(12.1)%
Europe	 338.7		386.6	(47.9)	(12.4)%
Total	\$ 1,503.9	\$	1,718.5	\$ (214.6)	(12.5)%

Asia-Pacific

Asia-Pacific net sales decreased \$96.5 million, or 12.8%, in 2019 compared to 2018. The decrease in net sales was primarily due to lower volume across all businesses within the Electronics segment and the Automotive segment, and unfavorable changes in foreign exchange rates of \$6.8 million.

Americas

Net sales in the Americas decreased \$70.2 million, or 12.1%, in 2019 compared to 2018 primarily due to lower volume across all businesses within the Electronics segment and the Automotive segment, the exit of the Custom business within Industrial segment during the second quarter of 2018 and unfavorable changes in foreign exchange rates of \$0.8 million, partially offset by higher volume in the power fuse and relay business within Industrial segments.

Europe

European net sales decreased \$47.8 million, or 12.4%, in 2019 compared to 2018. The decrease in net sales was primarily due to lower volume across all businesses within the Electronics segment and the Automotive segment, and unfavorable changes in foreign exchange rates of \$17.4 million, partially offset by higher volume in the power fuse business within the Industrial segment.

Liquidity and Capital Resources

Cash and cash equivalents were \$687.5 million as of December 26, 2020, an increase of \$156.4 million as compared to December 28, 2019.

As of December 26, 2020, \$352.8 million of the Company's \$687.5 million cash and cash equivalents was held by non-U.S. subsidiaries. Of the \$352.8 million, at least \$147.4 million can be repatriated with minimal tax consequences, although in certain cases a non-U.S. withholding tax would be payable but subsequently refunded. With respect to the remaining \$205.4 million, the Company has recognized deferred tax liabilities on approximately \$113.3 million as of December 26, 2020 because the amounts are not considered to be permanently reinvested, and the Company may access additional amounts through loans and other means. Repatriation of some non-U.S. cash balances is restricted by local laws. Management regularly evaluates whether foreign earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company and its foreign subsidiaries. Changes in economic and business conditions, non-U.S. or U.S. tax laws could result in changes to these judgments and the need to record additional tax liabilities.

The Company has historically supported its liquidity needs through cash flows from operations. Management expects that the Company's (i) current level of cash, cash equivalents, and marketable securities, (ii) current and forecasted cash flows from operations, (iii) availability under existing funding arrangements, and (iv) access to capital in the capital markets will provide sufficient funds to support the Company's operations, capital expenditures, investments, and debt obligations on both a short-term and long-term basis.

Revolving Credit Facility/Term Loan

On March 4, 2016, the Company entered into a five-year credit agreement ("Credit Agreement") with a group of lenders for up to \$700.0 million. The Credit Agreement consisted of an unsecured revolving credit facility ("Revolving Credit Facility") of \$575.0 million and an unsecured term loan credit facility ("Term Loan") of up to \$125.0 million. In addition, the Company had the ability, from time to time, to increase the size of the Revolving Credit Facility and the Term Loan by up to an additional \$150.0 million, in the aggregate, in each case in minimum increments of \$25.0 million, subject to certain conditions and the agreement of participating lenders.

On October 13, 2017, the Company amended the Credit Agreement to increase the Revolving Credit Facility from \$575.0 million to \$700.0 million and increase the Term Loan from \$125.0 million to \$200.0 million and to extend the expiration date from March 4, 2021 to October 13, 2022. The Credit Agreement also includes the option for the Company to increase the size of the Revolving Credit Facility and the Term Loan by up to an additional \$300.0 million, in the aggregate, subject to the satisfaction of certain conditions set forth in the Credit Agreement. Term Loans may be made in up to two advances. The first advance of \$125.0 million occurred on October 13, 2017 and the second advance of \$75.0 million occurred on January 16, 2018. For the Term Loan, the Company was required to make quarterly principal payments of 1.25% of the original term loan (\$2.5 million quarterly) through maturity, with the remaining balance due on October 13, 2022. The Company paid \$5.0 million of principal payments on the term loan before the Company amended the Credit Agreement on April 3, 2020 as discussed below.

On March 25, 2020, the company borrowed \$100.0 million from the revolving credit facility to preserve financial flexibility and enhance liquidity, given the increasing levels of uncertainty related to COVID-19.

On April 3, 2020, the Company amended the Credit Agreement to effect certain changes, including, among others: (i) eliminating the \$200.0 million unsecured term loan credit facility, the remaining outstanding balance (\$140.0 million) of which was repaid in full on April 3, 2020 through the revolving credit facility; (ii) making certain financial and non-financial covenants less restrictive on the Company; (iii) modifying performance-based interest rate margins and undrawn fees; and (iv) extending the maturity date to April 3, 2025. The amended Credit Agreement also allows the Company to increase the size of the revolving credit facility or enter into one or more tranches of term loans if there is no event of default and the Company is in compliance with certain financial covenants. The Company made payments of \$110.0 million on the amended revolving credit facility during the fiscal year ended December 26, 2020. The balance under the facility was \$130.0 million as of December 26, 2020.

Outstanding borrowings under the Credit Agreement bear interest, at the Company's option, at either LIBOR fixed for interest periods of one, two, three or six-month periods plus 1.25% to 2.00%, or at the bank's Base Rate, as defined, plus 0.25% to 1.00%, based upon the Company's Consolidated Leverage Ratio, as defined. The Company is also required to pay commitment fees on unused portions of the credit agreement ranging from 0.125% to 0.20%, based on the Consolidated Leverage Ratio, as defined in the agreement. The credit agreement includes representations, covenants and events of default that are customary for financing transactions of this nature. The effective interest rate on outstanding borrowings under the credit facility was 1.65% at December 26, 2020.

As of December 26, 2020, the Company had no amounts outstanding in letters of credit and had available \$383.5 million of borrowing capacity under the Revolving Credit Facility.

Senior Notes

On December 8, 2016, the Company entered into a Note Purchase Agreement, pursuant to which the Company issued and sold €212 million aggregate principal amount of senior notes in two series. The funding date for the Euro denominated senior notes occurred on December 8, 2016 for €117 million in aggregate amount of 1.14% Senior Notes, Series A, due December 8, 2023 ("Euro Senior Notes, Series A due 2023"), and €95 million in aggregate amount of 1.83% Senior Notes, Series B due December 8, 2028 ("Euro Senior Notes, Series B due 2028") (together, the "Euro Senior Notes"). Interest on the Euro Senior Notes is payable semiannually on June 8 and December 8, commencing June 8, 2017.

On December 8, 2016, the Company entered into a Note Purchase Agreement, pursuant to which the Company issued and sold \$125 million aggregate principal amount of senior notes in two series. On February 15, 2017, \$25 million in aggregate principal amount of 3.03% Senior Notes, Series A, due February 15, 2022 ("U.S. Senior Notes, Series A due 2022"), and \$100 million in aggregate principal amount of 3.74% Senior Notes, Series B, due February 15, 2027 ("U.S. Senior Notes, Series B due 2027") (together, the "U.S. Senior Notes due 2022 and 2027") were funded. Interest on the U.S. Senior Notes due 2022 and 2027 is payable semiannually on February 15 and August 15, commencing August 15, 2017.

On November 15, 2017, the Company entered into a Note Purchase Agreement pursuant to which the Company issued and sold \$175 million in aggregate principal amount of senior notes in two series. On January 16, 2018, \$50 million aggregate principal amount of 3.48% Senior Notes, Series A, due February 15, 2025 ("U.S. Senior Notes, Series A due 2025") and \$125 million in aggregate principal amount of 3.78% Senior Notes, Series B, due February 15, 2030 ("U.S. Senior Notes, Series B due 2030") (together, the "U.S. Senior Notes due 2025 and 2030" and with the Euro Senior Notes and the U.S. Senior Notes due 2022 and 2027, the "Senior Notes") were funded. Interest on the U.S. Senior Notes due 2025 and 2030 is payable semiannually on February 15 and August 15, commencing August 15, 2018.

The Company was in compliance with its debt covenants as of December 26, 2020 and expects to remain in compliance based on management's estimates of operating and financial results for 2020 and the foreseeable future. As of December 26, 2020, the Company met all the conditions required to borrow under the Credit Agreement and management expects the Company to continue to meet the applicable borrowing conditions.

Acquisitions

On January 28, 2021, the Company acquired Hartland Controls, a manufacturer and leading supplier of electrical components used primarily in heating, ventilation, air conditioning (HVAC) and other industrial and control systems applications with annualized sales of approximately \$70 million. The cash purchase price for Hartland Controls was approximately \$113 million and the operations of Hartland Controls will be included in the Industrial segment. The Company funded the acquisition with cash on hand.

During the year ended December 29, 2018, the Company paid \$306.5 million, net of cash acquired, for the acquisition of IXYS. Pursuant to the Securities Purchase Agreement, the Company paid \$9.0 million for the acquisition of the remaining 38% outstanding common stock of Monolith during the year ended December 29, 2018. The Company financed the cash portion of the IXYS acquisition with a combination of cash on hand and borrowings under the Senior Notes and credit facility.

Cash Flow Overview

Operating cash inflows are largely attributable to sales of the Company's products. Operating cash outflows are largely attributable to recurring expenditures for raw materials, labor, rent, interest, taxes and other operating activities.

The following describes the Company's cash flows for the twelve months ended December 26, 2020 and December 28, 2019:

	(51.4) (51.4) (51.4) (67.8) (14.4)			ar
(in millions)		2020		2019
Net cash provided by operating activities	\$	258.0	\$	245.3
Net cash used in investing activities		(51.4)		(56.4)
Net cash used in financing activities		(67.8)		(146.3)
Effect of exchange rate changes on cash and cash equivalents		17.6		(1.2)
Increase in cash and cash equivalents		156.4		41.4
Cash and cash equivalents at beginning of year		531.1		489.7
Cash and cash equivalents at end of year	\$	687.5	\$	531.1

Cash Flow from Operating Activities

Net cash provided by operating activities was \$258.0 million for 2020, compared to \$245.3 million during 2019. The increase in net cash provided by operating activities was primarily due to lower annual incentive payments and favorable changes in net working capital partially offset by lower earnings largely due to the impact of COVID-19.

Cash Flow from Investing Activities

Net cash used in investing activities was \$51.4 million for 2020, compared to \$56.4 million during 2019. Capital expenditures were \$56.2 million, representing a decrease of \$5.7 million compared to 2019. The Company also received proceeds of \$4.8 million and \$6.2 million, respectively, in 2020 and 2019 primarily as a result of the sale of properties within the Industrial segment.

Cash Flow from Financing Activities

Net cash used in financing activities was \$67.8 million for 2020 compared to \$146.3 million for 2019. The Company made principal payments of \$5.0 million and \$10.0 million on the term loan during fiscal year 2020 and 2019, respectively. During fiscal year 2020, the company borrowed \$100.0 million from its revolving credit facility to preserve financial flexibility and enhance liquidity, given the increasing levels of uncertainty related to COVID-19. On April 3, 2020, the Company amended the Credit Agreement to eliminate the \$200.0 million unsecured term loan credit facility, with the remaining outstanding balance of \$140.0 million repaid in full on April 3, 2020 through a new borrowing of \$140.0 million under the recently amended revolving credit facility. The Company made payments of \$110.0 million on the amended revolving credit facility during the fiscal year 2020. The balance under the facility was \$130.0 million as of December 26, 2020.

For the fiscal year 2020 and 2019, the Company repurchased 175,110 and 579,916 shares of its common stock totaling \$22.9 million and \$95.0 million, respectively, but made payments of \$99.4 million related to settled share repurchases during the fiscal year 2019. Additionally, dividends paid increased \$2.2 million from \$44.7 million for the fiscal year 2019 to \$46.8 million for the fiscal year 2020.

The following describes the Company's cash flows for the twelve months ended December 28, 2019 and December 29, 2018:

	\$ 245.3 \$ (56.4) extivities (146.3)		ar	
(in millions)		2019		2018
Net cash provided by operating activities	\$	245.3	\$	331.8
Net cash used in investing activities		(56.4)		(382.3)
let cash provided by operating activities let cash used in investing activities let cash (used in) provided by financing activities leffect of exchange rate changes on cash and cash equivalents Increase in cash and cash equivalents		(146.3)		121.9
Ite cash provided by operating activities Ite cash used in investing activities Ite cash (used in) provided by financing activities Iffect of exchange rate changes on cash and cash equivalents Increase in cash and cash equivalents Cash and cash equivalents at beginning of year		(1.2)		(11.4)
Increase in cash and cash equivalents		41.4		60.0
Cash and cash equivalents at beginning of year		489.7		429.7
Cash and cash equivalents at end of year	\$	531.1	\$	489.7

Cash Flow from Operating Activities

Net cash provided by operating activities was \$245.3 million for 2019, compared to \$331.8 million during 2018. The decrease in net cash provided by operating activities was primarily driven by lower earnings and higher working capital levels primarily due to the timing of supplier payments, payroll year-end cut off and higher annual incentive compensation payments in 2019.

Cash Flow from Investing Activities

Net cash used in investing activities was \$56.4 million for 2019, compared to \$382.3 million during 2019. Net cash used for the acquisition of IXYS was \$306.5 million and \$9.0 million for the acquisition of the remaining 38% outstanding common stock of Monolith in 2018. Capital expenditures were \$61.9 million, representing a decrease of \$12.9 million compared to 2018. The Company also received proceeds of \$6.2 million in 2019 primarily as a result of the sale of a property within the Industrial segment.

Cash Flow from Financing Activities

Net cash used in financing activities was \$146.3 million for 2019 compared to net cash provided by financing activities of \$121.9 million for 2018. The Company repurchased 579,916 shares of its common stock during fiscal 2019 totaling \$95.0 million, but made payments of \$99.4 million related to settled share repurchases. The Company made payments of \$10.0 million on the term loan in 2019 as compared to \$310.0 million of proceeds from the credit facility, term loan and senior notes payable and \$102.5 million of payments on the credit facility and term loan during 2018.

Contractual Obligations and Commitments

The following table summarizes outstanding contractual obligations and commitments as of December 26, 2020:

		Payr	i			
(in thousands)	Total	Less than 1 Year	1 to 3 Years		3 to 5 Years	Greater than 5 Years
Long-term debt ^(a)	\$ 691,148	\$ 	\$ 170,298	\$	180,000	\$ 340,850
Interest payments ^(b)	100,473	16,048	30,806		24,639	28,980
Operating lease payments ^(c)	21,688	7,660	10,114		3,612	302
Income Tax Obligation ^(d)	23,754	3,000	7,579		13,175	_
Purchase obligations ^(e)	18,214	15,089	1,008		1,008	1,109
Total	\$ 855,277	\$ 41,797	\$ 219,805	\$	222,434	\$ 371,241

- (a) Excludes offsetting issuance costs of \$4.1 million. Euro denominated debt amounts are converted based on the Euro to U.S. Dollar spot rate at year end. For more information see Note 9, *Debt*, of the Notes to Consolidated Financial Statements.
- (b) Amounts represent estimated contractual interest payments on outstanding debt. Rates in effect as of December 26, 2020 are used for variable rate debt. For more information see Note 9, *Debt*, of the Notes to Consolidated Financial Statements.
- (c) For more information see Note 7, *Lease Commitments*, of the Notes to Consolidated Financial Statements.
- (d) The Income Tax Obligation represents the remaining amounts payable regarding the 2017 Littelfuse Toll Charge. The Company has elected to pay the 2017 Littelfuse Toll Charge over the eight-year period prescribed by the Tax Act. For more information see Note 14, *Income Taxes*, of the Notes to Consolidated Financial Statements.
- (e) Purchase obligations include purchase commitments and commitments for capital expenditures not recognized in the Company's Consolidated Balance Sheets.

In addition to the above contractual obligations and commitments, the Company had the following obligations at December 26, 2020:

The Company has Company-sponsored defined benefit pension plans covering employees at various non-U.S. subsidiaries including the U.K., Germany, the Philippines, China, Japan, Mexico, Italy and France. At December 26, 2020, the Company

had a net unfunded status of \$48.5 million. The Company expects to make approximately \$2.2 million of contributions to the plans in 2021. For additional information, see Note 11, *Benefit Plans*, of the Notes to Consolidated Financial Statements.

Dividends

Cash dividends paid totaled \$46.8 million, \$44.7 million and \$40.0 million for 2020, 2019 and 2018, respectively. On January 21, 2021, the Board of Directors of the Company declared a quarterly cash dividend of \$0.48 per share, payable on March 4, 2021 to stockholders of record as of February 18, 2021.

Capital Resources

The Company expends capital to support its operating and strategic plans. Such expenditures include strategic acquisitions, investments to maintain capital assets, develop new products or improve existing products, and to enhance capacity or productivity. Many of the associated projects have long lead-times and require commitments in advance of actual spending.

Share Repurchase Program

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, 2018 to April 30, 2019 ("2018 program"). On April 26, 2019, the Company's Board of Directors authorized to a program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2019 to April 30, 2020 ("2019 program") to replace its previous expired 2018 program. On April 23, 2020, the Company's Board of Directors authorized a new program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2020 to April 30, 2021 (the "2020 program") to replace its previous expired 2019 program. There are 1,000,000 shares remaining available for purchase under the 2020 program as of December 26, 2020.

During the fiscal year 2020, 2019, and 2018, the Company repurchased 175,110, 579,916, and 391,972 shares of its common stock totaling \$22.9 million, \$95.0 million, and \$67.9 million, respectively.

Off-Balance Sheet Arrangements

As of December 26, 2020, 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

Recently issued accounting standards and their estimated effect on the Company's Consolidated Financial Statements are described in Note 1, *Summary of Significant Accounting Policies and Other Information*, of the Notes to Consolidated Financial Statements.

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 Risk

During fiscal year 2020, the company borrowed \$100.0 million from its revolving credit facility to preserve financial flexibility and enhance liquidity, given the increasing levels of uncertainty related to COVID-19. On April 3, 2020, the Company amended the Credit Agreement to eliminate the \$200.0 million unsecured term loan credit facility, with the remaining outstanding balance of \$140.0 million repaid in full on April 3, 2020 through a new borrowing of \$140.0 million under the recently amended revolving credit facility. The Company made payments of \$110.0 million on the amended revolving credit facility during the fiscal year 2020. The balance under the facility was \$130.0 million as of December 26, 2020. With variable interest rates, the Company is subject to future interest rate fluctuations in relation to these borrowings which could potentially have a negative impact on cash flows of the Company. A prospective increase of 100 basis points in the interest rate applicable to the Company's outstanding borrowings under its credit facility would result in an increase of approximately \$1.3 million in annual interest expense. This exposure would be partially if not fully offset by higher interest income from the Company's investments. The Company is not party to any currency exchange or interest rate protection agreements as of December 26, 2020.

Foreign Exchange Rate Risk

The majority of the company's operations consist of manufacturing and sales activities in foreign countries. The Company has operations in China, Germany, Mexico, Philippines, United Kingdom, Japan, Lithuania, Netherlands, Portugal, Singapore, South Korea, Spain, and the U.S. During 2020, sales to customers outside the U.S. were approximately 73% of total net sales. During 2019, sales to customers outside the U.S. were approximately 71% 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, Chinese renminbi, Japanese yen, or Korean won.

The company's foreign exchange exposures result primarily from inter-company loans, external borrowings, sale of products in foreign currencies, foreign currency denominated purchases, employee-related and other costs of running operations in foreign countries. The company's most significant foreign currency exposures are to the euro, the Chinese renminbi, Mexican peso, and Philippine peso. Changes in foreign exchange rates could affect the company's sales, costs, balance sheet values and earnings.

At December 26, 2020, the net value of the Company's assets with exposure to foreign currency risk was approximately \$147 million, with the largest exposure being a Japanese yen denominated inter-company loan with a Euro functional currency subsidiary. The reduction in earnings from a hypothetical instantaneous 10% adverse change in quoted foreign currency spot rates applied to foreign currency sensitive asset instruments would be \$15 million at December 26, 2020. At December 26, 2020, the net value of the Company's liabilities with exposure to foreign currency risk was \$438 million, with the largest exposure being U.S. Dollar denominated inter-company loans with a Euro functional currency subsidiary. The reduction in earnings from a hypothetical instantaneous 10% adverse change in quoted foreign currency spot rates applied to foreign currency sensitive liability instruments would be \$44 million at December 26, 2020. As a result of the mix in currencies impacting the hypothetical 10% changes, the movements in some instruments would offset movements in other instruments reducing the hypothetical exposure to the Company.

Commodity Price Risk

The Company uses various metals in the manufacturing of its products, including copper, zinc, tin, gold, and silver. Prices of these commodities can rise and result in materially higher costs of producing our products. The Company believes it has adequate primary and secondary sources of supply for each of our key materials and that, in periods of rising prices, the Company expects to recover a majority of the increased cost in the form of higher selling prices. However, recoveries typically lag the effect of cost increases due to the nature of our markets.

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 2021 could have a significant impact on the Company's transportation and utility expenses. Also due to the impact from COVID-19, freight costs increased significantly in 2020. While the Company is exposed to significant changes in certain commodity prices and expects higher freight costs for most of 2021, the Company actively monitors these exposures and may take various actions from time to time to mitigate any negative impacts of these exposures.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Report of Independent Registered Public Accounting Firm – Consolidated Financial Statements Report of Independent Registered Public Accounting Firm – Internal Control Over Financial Reporting Consolidated Financial Statements Consolidated Balance Sheets Consolidated Statements of Net Income Consolidated Statements of Comprehensive Income Consolidated Statements of Cash Flows Consolidated Statements of Equity Notes to Consolidated Financial Statements 1. Summary of Significant Accounting Policies and Other Information 2. Acquisitions and Dispositions 3. Inventories 4. Property, Plant, and Equipment 5. Goodwill and Other Intangible Assets 6. Accrued Liabilities 7. Lease Commitments 8. Restructuring, Impairment and Other Charges 9. Debt 10. Fair Value of Assets and Liabilities 11. Benefit Plans					
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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders

Littelfuse, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Littelfuse, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 26, 2020 and December 28, 2019, the related consolidated statements of net income, comprehensive income, equity, and cash flows for each of the three years in the period ended December 26, 2020, and the related notes and financial statement schedule included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 26, 2020 and December 28, 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 26, 2020, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 26, 2020, 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 February 18, 2021, expressed an unqualified opinion.

Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill Impairment Analysis – Automotive Sensors and Electronics - Semiconductor reporting units

The Company's consolidated goodwill balance was \$816.8 million as of December 26, 2020. The Company tests for impairment by comparing the estimated fair value of each reporting unit to its carrying value. If the carrying value exceeds its estimated fair value, a goodwill impairment loss is recorded for the difference. The Company recognized a non-cash impairment loss of \$33.8 million related to the Automotive Sensors reporting unit during the year ended December 26, 2020.

We identified the goodwill impairment analysis for the Automotive Sensors and Electronic - Semiconductor reporting units as a critical audit matter because management's goodwill impairment test involved a high degree of auditor judgment due to the significant estimation required to determine the fair value of each reporting unit. In particular, the fair value estimate was sensitive to significant assumptions, such as forecasted revenues and cash flows, discount rates, and estimated valuation multiples.

Our audit procedures related to the goodwill impairment analysis of the Automotive Sensors and Electronic - Semiconductor reporting units included the following, among others. We tested the design and operating effectiveness of controls over the Company's goodwill impairment assessment process, including review of the valuation model and significant assumptions used. We tested the forecasted revenues and cash flows by assessing the reasonableness of management's forecasts compared to current results and forecasted industry trends. With the assistance of our valuation specialists, we assessed the discount rates by developing a range of independent estimates and comparing those to the rates selected by management. We also involved our valuation specialists to evaluate the assumptions used in applying the market approach, including evaluating the reasonableness of estimated valuation multiples.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2014.

Southfield, Michigan February 18, 2021

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders

Littelfuse, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Littelfuse, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 26, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 26, 2020, 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) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 26, 2020, and our report dated February 18, 2021 expressed an unqualified opinion on those financial statements.

Basis for opinion

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 ("Management's Report"). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

Definition and limitations of internal control over financial reporting

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.

/s/ GRANT THORNTON LLP

Southfield, Michigan February 18, 2021

LITTELFUSE, INC. CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)	December 26, 2020			December 28, 2019		
ASSETS						
Current assets:						
Cash and cash equivalents	\$	687,525	\$	531,139		
Short-term investments		54		44		
Trade receivables, less allowances of \$45,237 and \$42,043, respectively		232,760		202,309		
Inventories		258,002		237,507		
Prepaid income taxes and income taxes receivable		3,029		4,831		
Prepaid expenses and other current assets		35,939		28,564		
Total current assets		1,217,309		1,004,394		
Net property, plant, and equipment		344,178		344,617		
Intangible assets, net of amortization		291,887		321,247		
Goodwill		816,812		820,589		
Investments		30,547		24,099		
Deferred income taxes		11,224		8,069		
Right of use assets, net		17,615		21,918		
Other assets		18,021		14,965		
Total assets	\$	2,747,593	\$	2,559,898		
LIABILITIES AND EQUITY	_					
Current liabilities:						
Accounts payable	\$	145,984	\$	117,320		
Accrued liabilities		110,478		84,120		
Accrued income taxes		19,186		14,122		
Current portion of long-term debt		_		10,000		
Total current liabilities		275,648		225,562		
Long-term debt, less current portion		687,034		669,158		
Deferred income taxes		50,134		49,763		
Accrued post-retirement benefits		45,802		38,198		
Non-current operating lease liabilities		12,950		17,166		
Other long-term liabilities		67,252		64,037		
Shareholders' equity:						
Common stock, par value \$0.01 per share: 34,000,000 shares authorized; shares issued, 26,131,544 and 25,855,203, respectively		259		256		
Additional paid-in capital		907,858		867,996		
Treasury stock, at cost: 1,644,283 and 1,473,901 shares, respectively		(242,366)		(216,447)		
Accumulated other comprehensive loss		(91,157)		(106,823)		
Retained earnings		1,034,048		950,901		
Littelfuse, Inc. shareholders' equity		1,608,642		1,495,883		
Non-controlling interest		131		131		
Total equity		1,608,773		1,496,014		
Total liabilities and equity	\$	2,747,593	\$	2,559,898		

LITTELFUSE, INC. CONSOLIDATED STATEMENTS OF NET INCOME

	Fiscal Year Ended									
(in thousands, except per share data)	D	December 26, 2020	D	ecember 28, 2019	D	ecember 29, 2018				
Net sales	\$	1,445,695	\$	1,503,873	\$	1,718,468				
Cost of sales		944,523		957,578		1,065,053				
Gross profit		501,172		546,295		653,415				
Selling, general, and administrative expenses		204,507		220,448		276,329				
Research and development expenses		52,538		79,997		87,264				
Amortization of intangibles		40,039		40,026		52,190				
Restructuring, impairment, and other charges		41,716		13,033		12,583				
Total operating expenses		338,800		353,504		428,366				
Operating income		162,372		192,791		225,049				
Interest expense		21,077		22,266		22,569				
Foreign exchange (gain) loss		(14,875)		5,224		(863)				
Other income, net		(5,083)		(583)		(1,599)				
Income before income taxes		161,253		165,884		204,942				
Income taxes		31,267		26,802		40,377				
Net income	\$	129,986	\$	139,082	\$	164,565				
Income per share:										
Basic	\$	5.33	\$	5.66	\$	6.62				
Diluted	\$	5.29	\$	5.60	\$	6.52				
Weighted average shares and equivalent shares outstanding:										
Basic		24,371		24,576		24,870				
Diluted		24,592		24,818		25,235				

LITTELFUSE, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

		Year Ended						
(in thousands)	Ι	December 26, 2020 December 28, 2019			December 29, 2018			
Net income	\$	129,986	\$	139,082	\$	164,565		
Other comprehensive income (loss):								
Pension and postemployment adjustments, net of tax		(16,095)		(8,087)		877		
Foreign currency translation adjustments		31,761		(812)		(25,338)		
Comprehensive income	\$	145,652	\$	130,183	\$	140,104		

LITTELFUSE, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year Ended			
(in thousands)	December 26, 2020	December 28, 2019	December 29, 2018		
OPERATING ACTIVITIES		2017	2010		
Net income	\$ 129,986	\$ 139,082	\$ 164,565		
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation	56,139	52,477	51,003		
Amortization of intangibles	40,039	40,026	52,190		
Impairment charges	36,078	322	2,218		
Deferred revenue	(593	(318)	3,965		
Non-cash inventory charges	_	_	36,927		
Stock-based compensation	18,129	19,046	27,431		
(Gain) loss on investments and other assets	(4,663) 4,854	(670)		
Deferred income taxes	(3,214) (1,147)	(4,679)		
Other	(18,230) 6,638	620		
Changes in operating assets and liabilities:					
Trade receivables	(25,588		(3,539)		
Inventories	(12,425	,	(33,971)		
Accounts payable	28,820	` ' '	13,708		
Accrued liabilities and income taxes	6,765	. , ,	29,329		
Prepaid expenses and other assets	6,788		(7,269)		
Net cash provided by operating activities	258,031	245,328	331,828		
INVESTING ACTIVITIES					
Acquisitions of businesses, net of cash acquired	_	(775)	(318,474)		
Proceeds from sales and maturities of short-term investments	_	_	1,407		
Purchases of property, plant, and equipment	(56,191) (61,895)	(74,753)		
Proceeds from sale of property, plant, and equipment	4,758	6,213	9,572		
Net cash used in investing activities	(51,433	(56,457)	(382,248)		
FINANCING ACTIVITIES					
Proceeds of revolving credit facility	240,000	_	60,000		
Payments of revolving credit facility	(110,000) —	(60,000)		
Proceeds of term loan	_	_	75,000		
Payments of term loan	(145,000	(10,000)	(42,500)		
Proceeds from senior notes payable	_	_	175,000		
Net proceeds related to stock-based award activities	18,744	7,800	18,857		
Cash dividends paid	(46,839		(39,993)		
Purchases of common stock	(22,927		(63,564)		
Debt issuance costs	(1,786		(903)		
Net cash (used in) provided by financing activities	(67,808		121,897		
Effect of exchange rate changes on cash and cash equivalents	17,596		(11,420)		
Increase in cash and cash equivalents	156,386		60,057		
Cash and cash equivalents at beginning of year	531,139		429,676		
Cash and cash equivalents at edgenning of year	\$ 687,525		\$ 489,733		
Supplementary Cash Flow Information	\$ 001,323	<u> </u>	+ 105,755		
Cash paid during the period for interest	\$ 20,095	\$ 21,240	\$ 18,462		
Cash paid during the period for income taxes, net of refunds		*	\$ 41,904		
Capital expenditures, not yet paid	\$ 27,619 \$ 6,126		\$ -1,704		
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LITTELFUSE, INC. CONSOLIDATED STATEMENTS OF EQUITY

Littelfuse, Inc. Shareholders' Equity

						-,					
(in thousands, except share and per share data)	mmon Stock	Addl. Paid in Capital	Treasury Stock	(Accum. Other Comp. Inc. (Loss)		Retained Earnings	coı	Non- ntrolling nterest	Total	
Balance at December 30, 2017	\$ 229	\$310,012	\$ (41,294)	\$	(63,668)	\$	722,140	\$	137	\$ 927,550	6
Net income	_	<u> </u>	_		_		164,565		_	164,56	5
Other comprehensive income (loss), net of tax					(24,461)					(24,46	1)
Cumulative effect adjustment	_				(9,795)		9,795		_	_	_
Stock-based compensation	_	27,431	_		_		_			27,43	1
Non-controlling interest	_	_			_		_		(6)	(6)
Withheld 36,482 shares on restricted share units for withholding taxes	_	_	(7,252)		_		_		_	(7,25)	2)
Stock options exercised	4	26,105			_		_		_	26,109	9
Issuance of common stock	21	472,280	_		_		_		_	472,30	1
Repurchases of common stock	_	_	(67,908)						_	(67,90	8)
Cash dividends paid (\$1.60 per share)	_	_	_		_		(39,993)		_	(39,99)	3)
Balance at December 29, 2018	\$ 254	\$835,828	\$(116,454)	\$	(97,924)	\$	856,507	\$	131	\$1,478,342	2
Net income	_	_	_		_		139,082		_	139,082	2
Other comprehensive income (loss), net of tax					(8,899)					(8,899	9)
Stock-based compensation	_	19,046	_		_		_		_	19,04	6
Withheld 25,940 shares on restricted share units for withholding taxes		_	(4,957)		_		_		_	(4,95	7)
Stock options exercised	2	13,122	_		_		_		_	13,12	4
Repurchases of common stock	_	_	(95,036)				_		_	(95,030	6)
Cash dividends paid (\$1.82 per share)	_						(44,688)			(44,68	8)
Balance at December 28, 2019	\$ 256	\$867,996	\$(216,447)	\$	(106,823)	\$	950,901	\$	131	\$1,496,014	4
Net income	_	_	_		_		129,986		_	129,980	6
Other comprehensive income (loss), net of tax					15,666					15,666	6
Stock-based compensation	_	18,129	_		_		_		_	18,129	9
Withheld 20,250 shares on restricted share units for withholding taxes		_	(2,992)		_		_		_	(2,992	2)
Stock options exercised	3	21,733	_		_		_		_	21,730	6
Repurchases of common stock	_		(22,927)		_		_		_	(22,92	7)
Cash dividends paid (\$1.92 per share)							(46,839)			(46,839	9)
Balance at December 26, 2020	\$ 259	\$907,858	\$(242,366)	\$	(91,157)	\$1	,034,048	\$	131	\$1,608,77	3

1. Summary of Significant Accounting Policies and Other Information

Nature of Operations

Littelfuse, Inc. and subsidiaries (the "Company") is a global manufacturer of leading technologies in circuit protection, power control and sensing. The company's products are found in automotive and commercial vehicles, industrial applications, data and telecommunications, medical devices, consumer electronics and appliances. With its broad product portfolio of fuses, semiconductors, polymers, ceramics, relays and sensors, and extensive global infrastructure, the Company's worldwide associates partner with its customers to design, manufacture and deliver innovative, high-quality solutions for a safer, greener and increasingly connected world.

Fiscal Year

References herein to "2020", "fiscal 2020" or "fiscal year 2020" refer to the fiscal year ended December 26, 2020. References herein to "2019", "fiscal 2019" or "fiscal year 2019" refer to the fiscal year ended December 28, 2019. References herein to "2018", "fiscal 2018" or "fiscal year 2018" refer to the fiscal year ended December 29, 2018. The Company operates on a 52-53 week fiscal year (4-4-5 basis) ending on the Saturday closest to December 31.

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, sales 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 generally accepted accounting principles in the United States of America 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.

Reclassification

For fiscal year ended December 26, 2020, the Company began presenting restructuring, impairment and other charges as a separate caption in the Consolidated Statements of Net Income. Certain amounts in the prior period financial statements have been reclassified to conform to the presentation of the current period financial statements. The impact of this reclassification resulted in a decrease in cost of sales, selling, general and administrative expenses, and research and development expenses with the corresponding change reported in restructuring, impairment and other charges. As a result, costs of sales, selling, general and administrative expenses, and research and development expenses were reduced by \$4.8 million, \$7.6 million, and \$0.5 million, respectively, for fiscal year 2019 and costs of sales and selling, general and administrative expenses were reduced by \$0.9 million, \$11.7 million, respectively for fiscal year 2018. This reclassification had no effect on the previously reported operating income and net income for the fiscal years ended December 28, 2019 and December 29, 2018.

Cash Equivalents

All highly liquid investments, with an original maturity of three months or less when purchased, are considered to be cash equivalents. The Company maintains a multi-currency notional cash pool for our participating entities with a third-party bank provider. Actual cash balances are not physically converted and are not commingled between participating legal entities. The Company will classify any overdraft balances within accrued expenses and other current liabilities on the accompanying consolidated balance sheets.

Short-Term and Long-Term Investments

As of December 26, 2020, the Company has an investment in Polytronics Technology Corporation Ltd. ("Polytronics"). The Company's Polytronics shares held at the end of fiscal 2020 and 2019 represent approximately 7.2% of total Polytronics shares

outstanding, respectively. The Polytronics investment is carried at fair value. The fair value of the Polytronics investment was €15.7 million (approximately \$19.2 million) at December 26, 2020 and €11.6 million (approximately \$12.8 million) at December 28, 2019.

As a result of the Company's acquisition of IXYS, the Company has equity ownerships in various investments that are accounted for under the equity method. The Company owns 45% of the outstanding equity of Powersem GmbH, a module manufacturer based in Germany, approximately 19% of the outstanding equity of EB Tech Ltd., a company with expertise in radiation technology based in South Korea, and approximately 24% of the outstanding common shares of Automated Technology, Inc., a supplier located in the Philippines that provides assembly and test services. All equity-level investments are less than majority owned. The Company recognized no gains and losses and \$0.6 million of losses from its equity method investments for the fiscal years ended December 26, 2020 and December 28, 2019, respectively. The balance of these equity method investments was \$11.4 million and \$11.1 million as of the fiscal years ended December 26, 2020 and December 28, 2019, respectively. See Note 18, *Related Party Transactions*, for further discussion.

The balance of the Company's investments accounted for under the cost method was \$0.5 million and \$0.4 million for the fiscal years ended December 26, 2020 and December 28, 2019, respectively. During the twelve months ended December 26, 2020 and December 28, 2019, the Company recorded impairment charges of \$0.1 million and \$7.3 million, respectively, in *Other income, net* in the Consolidated Statements of Net Income to adjust these certain investments to their estimated fair value. See Note 10, *Fair Value of Assets and Liabilities*, for further discussion.

The Company has investments related to its non-qualified Supplemental Retirement and Savings Plan. The Company maintains accounts for participants through which participants make investment elections. The investment securities are subject to the claims of the Company's creditors. The investment securities are all mutual funds. The investment securities are measured at net asset value. As of December 26, 2020 and December 28, 2019, the investment securities balance was \$13.2 million and \$10.5 million, respectively, related to the plan and are included in *Other assets* on the Consolidated Balance Sheets.

Trade Receivables

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.

The Company also maintains allowances against trade receivables 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 net realizable value, which approximates current replacement cost. Cost is principally determined using the first-in, first-out method. The Company maintains excess and obsolete reserves against inventory to reduce the carrying value to the expected net realizable value. These reserves 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.

Property, Plant, and Equipment

Land, buildings, and equipment are carried at cost. Depreciation is calculated using the straight-line method with useful lives of up to 21 years for buildings, three to ten years for equipment, seven years for furniture and fixtures, five years for tooling and three years for computer equipment. Leasehold improvements are depreciated over the lesser of their useful life or the lease term. Maintenance and repair costs are charged to expense as incurred. Major overhauls that extend the useful lives of existing assets are capitalized.

Goodwill

The Company annually tests goodwill for impairment on the first day of its fiscal fourth quarter, or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

During the second quarter of 2020, the Company recorded a non-cash charge of \$33.8 million to recognize the impairment of goodwill in the automotive sensors reporting unit within the Automotive segment. The goodwill impairment charge was due to reductions in the estimated fair value for the automotive sensors reporting unit based on lower expectations for future revenue, profitability and cash flows as compared to the expectations of the 2019 annual goodwill impairment test. These lower future expectations were driven by projected extended declines in end market demand due to the COVID-19 pandemic. In addition, during the second quarter of 2020, certain customers notified the Company of their decision to delay future programs along with a customer canceling an existing program. As of December 26, 2020, the automotive sensors reporting unit had \$9.8 million of remaining goodwill.

The Company compares each reporting unit's fair value, estimated based on comparable company market valuations and expected future discounted cash flows to be generated by the reporting unit, to its carrying value. The results of the annual goodwill impairment test as of September 27, 2020 indicated that the estimated fair values for each of the seven reporting units exceeded their respective carrying values. As of the most recent annual test conducted on September 27, 2020, the Company noted that the excess of fair value over the carrying value, was 218%, 44%, 160%, 137%, 59%, 139%, and 210% for its reporting units; Electronics-Passive Products and Sensors, Electronics-Semiconductor, Passenger Car Products, Commercial Vehicle Products, Automotive Sensors, Relays, and Power Fuse, respectively. Relatively small changes in the Company's key assumptions would not have resulted in any reporting units failing the goodwill impairment test. See Note 5, *Goodwill and Other Intangible Assets*, for additional information.

The Company also performs an interim review for indicators of impairment each quarter to assess whether an interim impairment review is required for any reporting unit. As part of its interim reviews, management analyzes potential changes in the value of individual reporting units based on each reporting unit's operating results for the period compared to expected results as of the prior year's annual impairment test. In addition, management considers how other key assumptions, including discount rates and expected long-term growth rates, used in the last annual impairment test, could be impacted by changes in market conditions and economic events. Based on the interim assessments as of December 26, 2020, management concluded that no events or changes in circumstances indicated that it was more likely than not that the fair value for any reporting unit had declined below its carrying value.

Long-Lived Assets

Customer relationships, trademarks and tradenames are amortized using the straight-line method over estimated useful lives that have a range of 5 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 5 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 4 to 10 years. Land use rights are amortized using the straight-line method over 50 years which is the term of the land use rights.

The Company assesses potential impairments to its long-lived assets if events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impaired asset is written down to its estimated fair value based upon the most recent information available. Estimated fair market value is generally measured by discounting estimated future cash flows. Long-lived assets, other than goodwill and other intangible assets, that are held for sale are recorded at the lower of carrying value or the fair market value less the estimated cost to sell.

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

The Company records annual income and expense amounts relating to its pension and post-retirement benefits plans based on calculations which include various actuarial assumptions including discount rates, expected long-term rates of return and compensation increases. The Company reviews its actuarial assumptions on an annual basis as of the fiscal year-end balance sheet date (or more frequently if a significant event requiring remeasurement occurs) and modifies the assumption based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the Consolidated Balance Sheets, but are generally amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive income (loss). The Company believes that the assumptions utilized in recording

its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors.

Revenue Recognition

Revenue Disaggregation

The following table disaggregates the Company's revenue by primary business units for the fiscal years ended December 26, 2020 and December 28, 2019:

	Fiscal Year Ended December 26, 2020)
(in thousands)	Electronics Segment		Automotive Segment					Total
Electronics – Semiconductor	\$	522,352	\$	_	\$	_	\$	522,352
Electronics – Passive Products and Sensors		415,410						415,410
Passenger Car Products		_		200,455		_		200,455
Commercial Vehicle Products				101,324				101,324
Automotive Sensors		_		93,985		_		93,985
Industrial Products						112,169		112,169
Total	\$	937,762	\$	395,764	\$	112,169	\$	1,445,695

	Fiscal Year Ended December 28, 2019							
(in thousands)	Electronics Segment		Automotive Segment					Total
Electronics – Semiconductor	\$	539,820	\$	_	\$	_	\$	539,820
Electronics – Passive Products and Sensors		421,260		_		_		421,260
Passenger Car Products		_		218,560		_		218,560
Commercial Vehicle Products				111,972				111,972
Automotive Sensors		_		98,001		_		98,001
Industrial Products						114,260		114,260
Total	\$	961,080	\$	428,533	\$	114,260	\$	1,503,873

During the fourth quarter of 2020, the Company transferred a business previously reported within the Electronics-Semiconductor reporting unit to the Electronics-Passive Products and Sensors reporting units. This transfer aligns with how this business will be managed and is complimentary with existing electronics passive products and sensors and markets into which they sell. The 2019 disaggregated revenue table has been reclassified to reflect this change. This transfer had no impact to the Electronics segment results.

See Note 16, Segment Information, for net sales by segment and countries.

The Company recognizes revenue on product sales in the period in which the Company satisfies its performance obligation and control of the product is transferred to the customer. The Company's sales arrangements with customers are predominately short term in nature and generally provide for transfer of control at the time of shipment as this is the point at which title and risk of loss of the product transfers to the customer. 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 amount of revenue recorded reflects the consideration to which the Company expects to be entitled in exchange for goods and may include adjustments for customer allowance, rebates and price adjustments. The Company's distribution channels are primarily through direct sales and independent third-party distributors.

The Company has elected the practical expedient under Accounting Standards Codification ("ASC") 340-40-25-4 to expense commissions when incurred as the amortization period of the commission asset the Company would have otherwise recognized is less than one year.

Revenue and Billing

The Company generally accepts orders from customers through receipt of purchase orders or electronic data interchange based on written sales agreements and purchasing contracts. Contract pricing and selling agreement terms are based on market factors, costs, and competition. Pricing is often 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. As the Company's standard payment terms are less than one year, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component. The Company also elected the practical expedient provided in ASC 606-10-25-18B to treat all product shipping and handling activities as fulfillment activities, and therefore recognize the gross revenue associated with the contract, inclusive of any shipping and handling revenue

Ship and Debit Program

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 for pricing allowances to reduce its price. When 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, electronic distributor inventory levels 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 certain customers, with prior authorization from the Company's 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 volume-based sales incentives to certain customers to encourage greater product sales. If customers achieve their specific quarterly or annual sales targets, they are entitled to rebates. The Company estimates the projected amount of rebates that will be achieved by the customer and recognizes this estimated cost as a reduction to revenue as products are sold.

Allowance for Doubtful Accounts

The Company currently measures the expected credit losses based on our historical credit loss experience. The Company has not experienced significant recent or historical credit losses and is not forecasting any significant credit losses which would require adjustments to our methodology. If current conditions and supportable forecasts indicate that our historical loss experience is not reasonable and no longer supportable, the Company may adjust its historical credit loss experience and to reflect these conditions and forecasts. The Company regularly analyzes its significant customer accounts and, when the Company becomes aware of a 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 analyzes 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 historical collection and loss 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.

As of December 26, 2020 and December 28, 2019, the Company's allowance for doubtful accounts was \$1.4 million and \$1.3 million, respectively. Additionally, the Company had less than \$1.0 million of trade receivables greater than 90 days past due as of December 26, 2020 and December 28, 2019, respectively.

Advertising Costs

The Company expenses advertising costs as incurred, which amounted to \$2.1 million, \$2.7 million, and \$2.8 million in fiscal years 2020, 2019 and 2018, respectively, 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 \$11.1 million, \$11.0 million, and \$12.3 million in fiscal years 2020, 2019, and 2018, 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. Adjustments from the translation process are recognized in "Shareholders' equity" as a component of "Accumulated other comprehensive income/ (loss)." The amount of foreign currency gain or loss from remeasurement recognized in the income statement was a gain of \$14.9 million in fiscal year 2020, a loss of \$5.2 million in fiscal year 2019, and a gain of \$0.9 million in fiscal year 2018.

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 operating cash flows. See Note 12, *Stock-Based Compensation*, for additional information on stock-based compensation.

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 $\[Epsilon]$ 2.3 million (\$2.9 million) and $\[Epsilon]$ 1.0 million (\$1.1 million) at December 26, 2020 and December 28, 2019, 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.

Other Income, Net

Other income, net generally consists of interest income, royalties, change in fair value of available-for-sale securities, pension non-service costs and other non-operating expense (income).

Income Taxes

The Company accounts for income taxes using the asset and 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 and other tax attribute carryforwards (excluding carryforwards where usage has been determined to be remote). 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. U.S. state and non-U.S. income taxes are provided on the portion of non-U.S. income that is expected to be remitted to the U.S. and be taxable (and non-U.S. income taxes are provided on the portion of non-U.S. income that is expected to be remitted to an upper-tier non-U.S. entity). Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Deferred U.S. income taxes and non-U.S. taxes are not provided on the excess of the investment value for financial reporting over the tax basis of investments in those non-U.S. subsidiaries for which such excess is considered to be permanently reinvested in those operations. Management regularly evaluates whether non-U.S. earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company and its non-U.S. subsidiaries. Changes in economic and business conditions, non-U.S. or U.S. tax laws, or the Company's financial situation could result in changes to these judgments and the need to record additional tax liabilities.

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.

On December 22, 2017, the U.S. enacted legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). Among other things, the Tax Act reduced the U.S. corporate federal income tax rate from 35% to 21%, added base broadening provisions which limit deductions and address excessive international tax planning, imposed a one-time tax (the "Toll Charge") on accumulated earnings of certain non-U.S. subsidiaries and enabled repatriation of earnings of non-U.S. subsidiaries free of U.S. federal income tax.

In the fourth quarter of 2018, within the measurement period outlined in SEC SAB No. 118, the Company finalized its estimates of the impact of the Tax Act and recorded a charge of \$3.2 million, including \$2.3 million for the Toll Charge and \$0.9 million for the net impact of other items. In addition, the Company recorded \$7.0 million for the Toll Charge associated with IXYS as part of the IXYS acquisition purchase price allocation. This was reflected in the opening balance sheet as an increase to goodwill and other long-term liabilities.

The Company elected to pay the 2017 Littelfuse Toll Charge over the eight-year period prescribed by the Tax Act. The long-term portion of this Toll Charge which remains payable as of December 26, 2020, totaling \$20.8 million, is included in *Other long-term liabilities*, and the anticipated 2021 annual installment payment of \$3.0 million is included in *Accrued income taxes*, on the Consolidated Balance Sheet as of December 26, 2020. The Company did not elect to pay the 2018 IXYS Toll Charge over the eight year period provided by the Tax Act and therefore there is no 2018 IXYS Toll Charge which remains payable as of December 26, 2020.

One of the base broadening provisions of the Tax Act is commonly referred to as the "GILTI" provisions. In accordance with guidance issued by the FASB staff, the Company has adopted an accounting policy to treat any GILTI inclusions as a period cost if and when incurred. Thus, for the fiscal years ended December 26, 2020, December 28, 2019, and December 29, 2018, deferred taxes were computed without consideration of the possible future impact of the GILTI provisions, and any current year impact was recorded as a part of the current portion of income tax expense.

Fair Value Measurements

Certain assets and liabilities are required to be recorded at fair value on a recurring basis. Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The Company records the fair value of its available-for-sale securities and pension plan assets on a recurring basis. Assets measured at fair value on a nonrecurring basis include long-lived assets held and used, long-lived assets held for sale, goodwill and other intangible assets. The fair value of cash and cash equivalents, accounts receivable, short-term debt and accounts payable approximate their carrying values. The three-tier value hierarchy, which prioritizes valuation methodologies based on the reliability of the inputs, is:

- **Level 1** Valuations based on quoted prices for identical assets and liabilities in active markets.
- **Level 2** Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
- **Level 3** Valuations based on unobservable inputs reflecting the Company's own assumptions, consistent with reasonably available assumptions made by other market participants.

Recently Adopted Accounting Standards

In August 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-14 "Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans," which amends ASC 715-20, Compensation - Retirement Benefits - Defined Benefit Plans - General. The amended guidance modifies the disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans by removing and adding certain disclosures for these plans. The eliminated disclosures include (a) the amounts in OCI expected to be recognized in net periodic benefit costs over the next fiscal year, and (b) the effects of a one percentage point change in assumed health care cost trend rates on the net periodic benefit costs and the benefit obligation for post-retirement health care benefits. Additional disclosures include descriptions of significant gains and losses affecting the benefit obligation for the period. This guidance is effective for financial statements

issued for fiscal years ending after December 15, 2020. The Company adopted the standard as of December 26, 2020. The adoption of this guidance did not have a material effect on the Company's Consolidated Financial Statements.

In March 2020, the FASB issued Accounting Standards Update ("ASU") No. 2020-04 Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." This ASU provides optional expedient and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The objective of this is to provide optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting due to the cessation of the London Interbank Offered Rate (LIBOR). The amendments in this update are effective for all entities as of March 12, 2020 through December 31, 2022. The adoption of this guidance did not have a material effect on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-15, "Intangibles - Goodwill and Other - Internal-Use Software (Subtopic: 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)." ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The Company adopted the new standard on December 29, 2019. The adoption of ASU 2018-15 did not have a material impact on our Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-13 "Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirement for Fair Value Measurement." ASU 2018-13 modifies the disclosure requirements in Topic 820: "Fair Value Measurement," based on the FASB Concepts Statement, "Conceptual Framework for Financial Reporting - Chapter 8: Notes to Financial Statements," including consideration of costs and benefits. The new standard removes certain disclosures, modifies other disclosures and adds additional disclosures related to fair value measurement. The Company adopted the new standard on December 29, 2019. The adoption of ASU 2018-13 did not have a material impact on our Consolidated Financial Statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments." The standard, including subsequently issued amendments (ASU 2019-11 and ASU 2019-04), modifies the measurement approach for credit losses on financial instruments, including trade receivables, from an incurred loss method to a current expected credit loss method ("CECL"). The standard requires the measurement of expected credit losses to be based on relevant information, including historical experiences, current conditions and a forecast that is supportable. The Company adopted the new standard on December 29, 2019. The adoption of the standard did not have a material effect on our Consolidated Financial Statements.

Recently Issued Accounting Standards

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740) - Simplifying the Accounting for Income Taxes" as part of its initiative to reduce complexity in the accounting standards. The guidance is effective for fiscal years beginning after December 15, 2020 with early adoption permitted. The Company does not expect material effect from the adoption of this guidance on the Company's Consolidated Financial Statements.

2. Acquisitions

The Company accounts for acquisitions using the acquisition method in accordance with ASC 805, "Business Combinations," in which assets acquired and liabilities assumed are recorded at fair value as of the date of acquisition. The operating results of the acquired business are included in the Company's Consolidated Financial Statements from the date of the acquisition.

IXYS Corporation

On January 17, 2018, the Company acquired IXYS Corporation ("IXYS"), a global pioneer in the power semiconductor and integrated circuit markets with a focus on medium to high voltage power semiconductors across the industrial, communications, consumer and medical markets. IXYS had a broad customer base, serving more than 3,500 customers through its direct sales force and global distribution partners. The acquisition of IXYS accelerated the Company's growth across the power control market driven by IXYS's extensive power semiconductor portfolio and technology expertise. With IXYS, the Company was able to diversify and expand its presence within industrial electronics markets, leveraging the strong IXYS industrial OEM customer base. The Company leveraged its power semiconductor portfolio in automotive markets to expand its global content per vehicle.

Upon completion of the acquisition, at IXYS stockholders' election and subject to proration, each share of IXYS common stock, par value \$0.01 per share, owned immediately prior to the effective time were canceled and extinguished and automatically converted into the right to receive: (i) \$23.00 in cash (subject to applicable withholding tax), without interest (referred to as the cash consideration), or (ii) 0.1265 of a share of common stock, par value \$0.01 per share, of Littelfuse (referred to as the stock consideration). IXYS stockholders received cash in lieu of any fractional shares of Littelfuse common stock that the IXYS stockholders would otherwise have been entitled to receive. Additionally, each outstanding option to purchase shares of IXYS common stock granted under an IXYS equity plan were assumed by Littelfuse and converted into an option to acquire (i) a number of shares of Littelfuse common stock equal to the number of shares of IXYS common stock subject to such option immediately prior to the effective time multiplied by 0.1265, rounded down to the nearest whole share, with (ii) an exercise price per share of Littelfuse common stock equal to the exercise price of such IXYS stock option immediately prior to the effective time divided by 0.1265, rounded up to the nearest whole cent.

Based on the \$207.5 per share opening price of Littelfuse common stock on January 17, 2018, the consideration IXYS stockholders received in exchange of their IXYS common stock in the acquisition had a value of \$814.8 million comprised of \$380.6 million of cash and \$434.2 million of Littelfuse stock. In addition to the consideration transferred related to IXYS common stock, the value of consideration transferred, and included in the purchase price, related to IXYS stock options that were converted to Littelfuse stock options, or cash settled, had a value of \$41.7 million. As a result, total consideration was valued at \$856.5 million.

The total purchase price of \$856.5 million has been allocated to assets acquired and liabilities assumed, as of the completion of the acquisition, based on estimated fair values. The following table summarizes the purchase price allocation of the fair value of assets acquired and liabilities assumed in the IXYS acquisition:

(in thousands)	Purchase Price Allocation
Total purchase consideration:	
Cash, net of cash acquired	302,865
Cash settled stock options	3,622
Littelfuse stock	434,192
Converted stock options	38,109
Total purchase consideration	778,788
Allocation of consideration to assets acquired and liabilities assumed:	
Current assets, net	155,930
Property, plant, and equipment	77,442
Intangible assets	212,720
Goodwill	382,360
Other non-current assets	28,706
Other non-current liabilities	(78,370)
	778,788

Approximately \$49.1 million of net receivables was included in IXYS's current assets, All IXYS goodwill, other assets and liabilities were recorded in the Electronics segment and primarily reflected in the Americas and European geographic areas. The goodwill resulting from this acquisition consists largely of the Company's expected future product sales and synergies from combining IXYS's products and technology with the Company's existing electronics product portfolio. Goodwill resulting from the IXYS acquisition is not expected to be deductible for tax purposes. The Company recorded \$7.0 million for the Toll Charge associated with IXYS as part of the IXYS acquisition purchase price allocation (this reflects a reduction of \$1.0 million recorded in the fourth quarter of 2018 and \$2.0 million recorded in the third quarter of 2018 as a consequence of revisions to the Company's original estimates). As a result of the Company completing its fair value analysis, in the fourth quarter of 2018, the company recorded a reduction of \$2.6 million in certain investments held by IXYS.

Included in the Company's Consolidated Statements of Net Income for the fiscal year ended December 29, 2018 are net sales of approximately \$378.2 million, and loss before income taxes of \$22.2 million, since the January 17, 2018 acquisition of IXYS. The Company recognized approximately \$11.9 million of stock compensation expense related to IXYS stock options converted to Littelfuse stock options during the fiscal year ended December 29, 2018, of which \$4.5 million was recognized immediately as it related to prior service periods.

As required by purchase accounting rules, the Company recorded a \$36.9 million step-up of inventory to its fair value as of the acquisition date based on the preliminary valuation. The step-up was fully amortized as a non-cash charge to cost of goods sold during the first and second quarters of 2018, as the acquired inventory was sold, and reflected as other non-segment costs.

During the fiscal year ended December 29, 2018, the Company incurred approximately \$11.0 million of legal and professional fees related to this acquisition which were primarily recognized as *selling*, *general*, *and administrative expenses*. These costs were reflected as other non-segment costs.

Pro Forma Results

The following table summarizes, on an unaudited pro forma basis, the combined results of operations of the Company and IXYS as though the acquisition had occurred as of January 1, 2017. The pro forma amounts presented are not necessarily indicative of either the actual consolidated results had the IXYS acquisition occurred as of January 1, 2017 or of future consolidated operating results.

		r the Fiscal Year Ended
(in thousands, except per share amounts)		December 29, 2018
Net sales	\$	1,735,181
Income before income taxes		272,724
Net income		215,228
Net income per share — basic		8.61
Net income per share — diluted		8.53

Pro forma results presented above primarily reflect the following adjustments:

	For the Fiscal Year Ended				
(in thousands)		cember 29, 2018			
Amortization ^(a)	\$	12,009			
Transaction costs ^(b)		9,976			
Amortization of inventory step-up ^(c)		36,927			
Stock compensation ^(d)		5,845			
Income tax impact of above items		(15,446)			

- (a) The amortization adjustment for the twelve months ended December 29, 2018 primarily reflects the reduction of amortization expense in the period related to the Order backlog intangible asset. The Order backlog has a useful life of twelve months and is fully amortized in the fiscal 2017 for proforma results.
- (b) The transaction cost adjustments reflect the reversal of certain bank and attorney fees from the twelve months ended December 29, 2018.
- (c) The amortization of inventory step-up adjustment reflects the reversal of the amount recognized during the twelve months ended December 29, 2018. The inventory step-up was amortized over five months as the inventory was sold.
- (d) The stock compensation adjustment reflects the reversal of the portion of stock compensation for IXYS stock options that were converted to Littelfuse stock options and expensed immediately during the twelve months ended December 29, 2018.

For the fiscal year ended December 26, 2020 and December 28, 2019, the Company recorded \$0.8 million and \$2.7 million of acquisition-related expenses associated with contemplated acquisitions within *Selling, general and administrative expenses* in the Consolidated Statements of Net Income.

3. Inventories

The components of inventories at December 26, 2020 and December 28, 2019 are as follows:

(in thousands)	 2020	2019
Raw materials	\$ 85,394	\$ 76,732
Work in process	92,783	84,561
Finished goods	114,641	110,388
Inventory reserves	 (34,816)	(34,174)
Total	\$ 258,002	\$ 237,507

4. Property, Plant, and Equipment

The components of net property, plant, and equipment at December 26, 2020 and December 28, 2019 are as follows:

(in thousands)	 2020	2019
Land	\$ 22,851	\$ 24,758
Building	123,497	108,501
Equipment	678,220	631,273
Accumulated depreciation and amortization	 (480,390)	(419,915)
Total	\$ 344,178	\$ 344,617

The Company recorded depreciation expense of \$56.1 million, \$52.5 million, and \$51.0 million for the fiscal years ended December 26, 2020, December 28, 2019, and December 29, 2018, respectively.

5. Goodwill and Other Intangible Assets

The amounts for goodwill and changes in the carrying value by segment are as follows:

(in thousands)	Ele	Electronics		tomotive	Industrial			Total
Gross goodwill as of December 29, 2018	\$	656,039	\$	132,332	\$	46,830	\$	835,201
Accumulated impairment losses as of December 29, 2018						(8,486)		(8,486)
Net goodwill as of December 29, 2018	\$	656,039	\$	132,332	\$	38,344	\$	826,715
Changes during 2019:								
Foreign currency translation adjustments		(5,243)		(1,011)		128		(6,126)
Gross goodwill as of December 28, 2019		650,796		131,321		47,266		829,383
Accumulated impairment losses as of December 28, 2019						(8,794)		(8,794)
Net goodwill as of December 28, 2019	\$	650,796	\$	131,321	\$	38,472	\$	820,589
Changes during 2020:								
Impairments		_		(33,841)				(33,841)
Foreign currency translation adjustments		25,529		4,451		84		30,064
Gross goodwill as of December 26, 2020		676,325		138,354		47,551		862,230
Accumulated impairment losses as of December 26, 2020		_		(36,423)		(8,995)		(45,418)
Net goodwill as of December 26, 2020	\$	676,325	\$	101,931	\$	38,556	\$	816,812

The Company tests its goodwill annually for impairment on the first day of its fiscal fourth quarter, or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. During the second quarter of 2020, the Company recorded a non-cash charge of \$33.8 million to recognize the impairment of goodwill in the automotive sensors reporting unit within the Automotive segment. The goodwill impairment charge was due to reductions in the estimated fair value for the automotive sensors reporting unit based on lower expectations for future revenue, profitability and cash flows as compared to the expectations of the 2019 annual goodwill impairment test. These lower future expectations were driven by projected extended declines in end market demand due to the COVID-19 pandemic. In addition, during the second quarter of 2020, certain customers notified the Company of their decision to delay future programs along with a customer canceling their existing program. The goodwill impairment charge was determined using Level 3 inputs, including discounted cash flow analysis and comparable marketplace fair value data. As of December 26, 2020, the automotive sensors reporting unit had \$9.8 million of remaining goodwill.

The components of intangible assets at December 26, 2020 and December 28, 2019 are as follows:

	e.	D	1	21	2020	
AS	ot	Dece	mber	26.	2020	

(in thousands)	Gross Carrying Value	Accumulated Amortization	Net Book Value
Land use rights	\$ 10,280	\$ 2,007	\$ 8,273
Patents, licenses and software	\$ 137,210	\$ 92,868	\$ 44,342
Distribution network	43,910	38,980	4,930
Customer relationships, trademarks, and tradenames	 372,064	137,722	234,342
Total	\$ 563,464	\$ 271,577	\$ 291,887

As of December 28, 2019

2010

(in thousands)	Gross Carrying Value	Accumulated Amortization	Net Book Value
Land use rights	\$ 9,649	\$ 1,730	\$ 7,919
Patents, licenses and software	\$ 131,164	\$ 78,828	\$ 52,336
Distribution network	43,239	36,163	7,076
Customer relationships, trademarks, and tradenames	 360,534	106,618	253,916
Total	\$ 544,586	\$ 223,339	\$ 321,247

During the year ended December 29, 2018, the Company recorded additions to other intangible assets of \$212.7 million, for acquisitions during 2018, the components of which were as follows:

	2018						
(in thousands, except weighted average useful life)	Weighted Average Useful Life (Years)		Amount				
Patents, licenses and software	8.0	\$	51,500				
Customer relationships, trademarks, and tradenames	17.2		148,800				
Order backlog	1.0		12,420				
Total		\$	212,720				

For intangible assets with definite lives, the Company recorded amortization expense of \$40.0 million, \$40.0 million, and \$52.2 million in 2020, 2019, and 2018, respectively.

Estimated annual amortization expense related to intangible assets with definite lives at December 26, 2020 is as follows:

(in thousands)	_	Amount
2021	\$	38,858
2022		37,851
2023		33,279
2024		30,121
2025		29,689
2026 and thereafter		122,089
Total	\$	291,887

6. Accrued Liabilities

The components of accrued liabilities at December 26, 2020 and December 28, 2019 are as follows:

(in thousands)	2020	2019
Employee-related liabilities	\$ 50,689	\$ 40,774
Operating lease liability	6,811	7,259
Interest	4,517	5,058
Restructuring liability	4,195	2,679
Other customer reserves	3,858	1,143
Professional services	3,321	3,986
Deferred revenue	2,959	828
Current benefit liability	2,751	1,106
Other non-income taxes	2,126	1,940
Other	29,251	19,347
Total	\$ 110,478	\$ 84,120

Employee-related liabilities consist primarily of payroll, sales commission, bonus, employee benefit accruals and workers' compensation. Bonus accruals include amounts earned pursuant to the Company's primary employee incentive compensation plans. Other accrued liabilities include miscellaneous operating accruals and other client-related liabilities.

7. Lease Commitments

Under ASC 842, a contract contains a lease if there is an identified asset and the Company has the right to control the asset. The Company determines whether a contract contains a lease at contract inception. The Company leases office and production space under various non-cancellable operating leases that expire no later than 2025. Certain real estate leases include one or more options to renew. The exercise of lease renewal options is at the Company's sole discretion. Options to extend the lease are included in the lease term when it is reasonably certain the Company will exercise the option. The Company also has production equipment, office equipment and vehicles under operating leases. The depreciable life of assets and leasehold improvements are limited by the expected lease term, unless there is a transfer of title or purchase option that is reasonably certain of exercise. Certain leases include rental payments adjusted periodically for inflation. The lease agreements do not contain any material residual value guarantee or material restrictive covenants. The Company has elected to use the available practical expedient to account for the lease and non-lease components of its leases as a single component. As the Company elected not to separate lease and non-lease components and instead to account for them as a single lease component, the variable lease cost primarily represents variable payments such as common area maintenance and utilities.

The Company does not have a published credit rating because it has no publicly traded debt; therefore, the Company is generating its incremental borrowing rate (IBR), using a synthetic credit rating model that compares its credit quality to other rated companies based on certain financial metrics and ratios. The reference rate will be based on the yield curve of companies with similar credit quality based on the metrics and adjusted for currency in regions where we have significant operations.

All leases with an initial term of 12 months or less that do not include an option to extend or purchase the underlying asset that the Company is reasonably certain to exercise ("short-term leases") are not recorded on the Consolidated Balance Sheets. Short-term lease expenses are recognized on a straight-line basis over the lease term.

The following table presents the classification of ROU assets and lease liabilities as of December 26, 2020 and December 28, 2019:

Leases (in thousands)	Consolidated Balance Sheet Classification			December 26, 2020		De	cember 28, 2019
Assets							
Operating ROU assets	Right of use assets, net	\$	17,615	\$	21,918		
Liabilities							
Current operating lease liabilities	Accrued liabilities	\$	6,811	\$	7,259		
Non-current operating lease liabilities	Non-current operating lease liabilities		12,950		17,166		
Total lease liabilities		\$	19,761	\$	24,425		

The following table represents the lease costs for 2020 and 2019:

Leases cost (in thousands)	Consolidated Statements of Net Income Classification	Year Ended nber 26, 2020	nl Year Ended mber 28, 2019
Short-term lease expenses	Cost of sales, SG&A expenses	\$ 512	\$ 562
Variable lease expenses	Cost of sales, SG&A expenses	1,307	916
Operating lease rent expenses	Cost of sales, SG&A expenses	 8,591	8,664
Total operating lease costs	Cost of sales, SG&A expenses	\$ 10,410	\$ 10,142

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 \$10.4 million, \$10.1 million, and \$9.6 million in 2020, 2019, and 2018, respectively.

Maturity of Lease Liabilities as of December 26, 2020 (in thousands)	Operating leases	
2021	\$ 7,	,660
2022	6,	162
2023	3,	952
2024	3,	350
2025		262
2026 and thereafter		302
Total lease payments	\$ 21,	,688
Present value of lease liabilities	\$ 19,	,761

Operating Lease Term and Discount Rate	Fiscal Year Ended December 26, 2020	Fiscal Year Ended December 28, 2019
Weighted-average remaining lease term (years)	3.41	4.05
Weighted-average discount rate	5.06 %	5.11 %

Cash Flow Information related to Leases (in thousands)	-	ear Ended r 26, 2020
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flow payments for operating leases	\$	(8,929)
Leased assets obtained in exchange for operating lease liabilities		2,862

8. Restructuring, Impairment and Other Charges

The Company recorded restructuring, impairment and other charges for fiscal years 2020, 2019, and 2018 as follows:

Fiscal	Vear	Ended	December	26	2020
riscai	i ear	Liiueu	December	4U.	4 040

(in thousands)	Electronics Automotive		Electronics Automotive Industrial		dustrial		Total	
Employee terminations	\$	2,540	\$	682	\$	2,231	\$	5,453
Other restructuring charges				175		10		185
Total restructuring charges		2,540		857		2,241		5,638
Impairment				33,841		2,237		36,078
Total	\$	2,540	\$	34,698	\$	4,478	\$	41,716

Fiscal Year Ended December 28, 2019

n thousands)		Electronics Automotive		utomotive Industr		dustrial	Total
Employee terminations	\$	5,313	\$	4,251	\$	795	\$ 10,359
Other restructuring charges		188		1,714		450	2,352
Total restructuring charges		5,501		5,965		1,245	12,711
Impairment				322			322
Total	\$	5,501	\$	6,287	\$	1,245	\$ 13,033

Fiscal Year Ended December 29, 2018

	Tiscai Teai Ended December 25, 2010											
(in thousands)	Electronics		Electronics Aut		cs Automotive Industrial		Automotive Industria		Automotive Industrial		Total	
Employee terminations	\$	8,742	\$	634	\$	127	\$	9,503				
Other restructuring charges		670		192				862				
Total restructuring charges		9,412		826		127		10,365				
Impairment				88		2,130		2,218				
Total	\$	9,412	\$	914	\$	2,257	\$	12,583				

<u> 2020</u>

For the year ended December 26, 2020, the Company recorded total restructuring charges of \$5.6 million, primarily for employee termination costs. These charges primarily related to the reorganization of certain manufacturing, selling and administrative functions across all segments and the previously announced consolidation of a manufacturing facility within the Industrial segment. The Company also recognized \$36.1 million of impairment charges, which included a \$33.8 million goodwill impairment charge associated with the automotive sensors reporting unit within the Automotive segment in the second quarter of 2020 and a \$2.2 million impairment charge related to the land and building associated with the Company's previously announced consolidation of a manufacturing facility within the Industrial segment in the first quarter of 2020. See Note 5, Goodwill and Other Intangible Assets for further discussion regarding the goodwill impairment charge.

2019

For the year ended December 28, 2019, the Company recorded total restructuring charges of \$12.7 million for employee termination costs and other restructuring charges. These charges primarily related to the reorganization of operations and selling, general and administrative functions as well as the integration of IXYS within the Electronics segment and the reorganization of operations in the automotive sensors and commercial vehicle products businesses within the Automotive segment.

In April 2019, we announced the closure of a European manufacturing facility in the automotive sensors business within the Automotive segment. The Company recorded \$1.7 million of employee termination costs and \$1.4 million of other restructuring and impairment charges associated with this plant closure.

2018

For the year ended December 29, 2018, the Company recorded total restructuring charges of \$10.4 million for employee termination costs and other restructuring charges related to lease termination and facility closure. These charges primarily related to the integration of IXYS and the reorganization of the IXYS Radio Pulse business within the Electronics segment and the reorganization of operations in the Commercial Vehicle Products business within the Automotive segment.

For the year ended December 29, 2018, the Company recorded impairment charges of \$2.2 million primarily related to the impairment of a building and a trade name associated with the exit of the Custom business within the Industrial segment.

The restructuring reserves as of December 26, 2020 and December 28, 2019 are \$4.2 million and \$2.7 million, respectively. The restructuring reserves are included within accrued liabilities. Payments associated with employee terminations reflected in the above table were substantially completed by December 26, 2020. The Company anticipates that the remaining payments associated with employee terminations will be completed in fiscal 2021.

9. Debt

The carrying amounts of debt at December 26, 2020 and December 28, 2019 are as follows:

(in thousands)	2020	 2019
Revolving Credit Facility	\$ 130,000	\$ _
Term Loan	_	145,000
Euro Senior Notes, Series A due 2023	142,679	129,808
Euro Senior Notes, Series B due 2028	115,850	105,400
U.S. Senior Notes, Series A due 2022	25,000	25,000
U.S. Senior Notes, Series B due 2027	100,000	100,000
U.S. Senior Notes, Series A due 2025	50,000	50,000
U.S. Senior Notes, Series B due 2030	125,000	125,000
Other	2,619	2,619
Unamortized debt issuance costs	(4,114)	 (3,669)
Total debt	687,034	679,158
Less: Current maturities		 (10,000)
Total long-term debt	\$ 687,034	\$ 669,158

Interest paid on all Company debt was approximately \$20.1 million, \$21.2 million, and \$18.5 million in fiscal year 2020, 2019, and 2018, respectively.

Revolving Credit Facility / Term Loan

On March 4, 2016, the Company entered into a five-year credit agreement ("Credit Agreement") with a group of lenders for up to \$700.0 million. The Credit Agreement consisted of an unsecured revolving credit facility ("Revolving Credit Facility") of \$575.0 million and an unsecured term loan credit facility ("Term Loan") of up to \$125.0 million. In addition, the Company had the ability, from time to time, to increase the size of the Revolving Credit Facility and the Term Loan by up to an additional \$150.0 million, in the aggregate, in each case in minimum increments of \$25.0 million, subject to certain conditions and the agreement of participating lenders.

On October 13, 2017, the Company amended the Credit Agreement to increase the Revolving Credit Facility from \$575.0 million to \$700.0 million and increase the Term Loan from \$125.0 million to \$200.0 million and to extend the expiration date from March 4, 2021 to October 13, 2022. The Credit Agreement also includes the option for the Company to increase the size of the Revolving Credit Facility and the Term Loan by up to an additional \$300.0 million, in the aggregate, subject to the satisfaction of certain conditions set forth in the Credit Agreement. Term Loans may be made in up to two advances. The first advance of \$125.0 million occurred on October 13, 2017 and the second advance of \$75.0 million occurred on January 16, 2018. For the Term Loan, the Company was required to make quarterly principal payments of 1.25% of the original term loan (\$2.5 million quarterly) through maturity, with the remaining balance due on October 13, 2022. The Company paid \$5.0 million of principal payments on the term loan before the Company amended the Credit Agreement on April 3, 2020 as discussed below.

On March 25, 2020, the company borrowed \$100.0 million from the revolving credit facility to preserve financial flexibility and enhance liquidity, given the increasing levels of uncertainty related to COVID-19.

On April 3, 2020, the Company amended the Credit Agreement to effect certain changes, including, among others: (i) eliminating the \$200.0 million unsecured term loan credit facility, the remaining outstanding balance (\$140.0 million) of which was repaid in full on April 3, 2020 through the revolving credit facility; (ii) making certain financial and non-financial covenants less restrictive on the Company; (iii) modifying performance-based interest rate margins and undrawn fees; and (iv) extending the maturity date to April 3, 2025. The amended Credit Agreement also allows the Company to increase the size of the revolving credit facility or enter into one or more tranches of term loans if there is no event of default and the Company is in compliance with certain financial covenants. The Company made payments of \$110.0 million on the amended revolving credit facility during the fiscal year ended December 26, 2020. The balance under the facility was \$130.0 million as of December 26, 2020.

Outstanding borrowings under the Credit Agreement bear interest, at the Company's option, at either LIBOR fixed for interest periods of one, two, three or six-month periods plus 1.25% to 2.00%, or at the bank's Base Rate, as defined, plus 0.25% to 1.00%, based upon the Company's Consolidated Leverage Ratio, as defined in the agreement. The Company was also required to pay commitment fees on unused portions of the credit agreement ranging from 0.125% to 0.20%, based on the Consolidated Leverage Ratio, as defined in the agreement. The credit agreement includes representations, covenants and events of default that are customary for financing transactions of this nature. The effective interest rate on outstanding borrowings under the credit facility was 1.65% at December 26, 2020.

As of December 26, 2020, the Company had no amounts outstanding in letters of credit and had available \$383.5 million of borrowing capacity under the Revolving Credit Facility. At December 26, 2020, the Company was in compliance with all covenants under the Credit Agreement.

Senior Notes

On December 8, 2016, the Company entered into a Note Purchase Agreement, pursuant to which the Company issued and sold €212 million aggregate principal amount of senior notes in two series. The funding date for the Euro denominated senior notes occurred on December 8, 2016 for €117 million in aggregate amount of 1.14% Senior Notes, Series A, due December 8, 2023 ("Euro Senior Notes, Series A due 2023"), and €95 million in aggregate amount of 1.83% Senior Notes, Series B due December 8, 2028 ("Euro Senior Notes, Series B due 2028") (together, the "Euro Senior Notes"). Interest on the Euro Senior Notes is payable semiannually on June 8 and December 8, commencing June 8, 2017.

On December 8, 2016, the Company entered into a Note Purchase Agreement, pursuant to which the Company issued and sold \$125 million aggregate principal amount of senior notes in two series. On February 15, 2017, \$25 million in aggregate principal amount of 3.03% Senior Notes, Series A, due February 15, 2022 ("U.S. Senior Notes, Series A due 2022"), and \$100 million in aggregate principal amount of 3.74% Senior Notes, Series B, due February 15, 2027 ("U.S. Senior Notes, Series B due 2027") (together, the "U.S. Senior Notes due 2022 and 2027") were funded. Interest on the U.S. Senior Notes due 2022 and 2027 is payable semiannually on February 15 and August 15, commencing August 15, 2017.

On November 15, 2017, the Company entered into a Note Purchase Agreement pursuant to which the Company issued and sold \$175 million in aggregate principal amount of senior notes in two series. On January 16, 2018, \$50 million aggregate principal amount of 3.48% Senior Notes, Series A, due February 15, 2025 ("U.S. Senior Notes, Series A due 2025") and \$125 million in aggregate principal amount of 3.78% Senior Notes, Series B, due February 15, 2030 ("U.S. Senior Notes, Series B due 2030") (together, the "U.S. Senior Notes due 2025 and 2030" and with the Euro Senior Notes and the U.S. Senior Notes 2022 and 2027, the "Senior Notes") were funded. Interest on the U.S. Senior Notes due 2025 and 2030 will be payable on February 15 and August 15, commencing on August 15, 2018.

The Senior Notes have not been registered under the Securities Act, or applicable state securities laws. The Senior Notes are general unsecured senior obligations and rank equal in right of payment with all existing and future unsecured unsubordinated indebtedness of the Company.

The Senior Notes are subject to certain customary covenants, including limitations on the Company's ability, with certain exceptions, to engage in mergers, consolidations, asset sales and transactions with affiliates, to engage in any business that would substantially change the general business of the Company, and to incur liens. In addition, the Company is required to satisfy certain financial covenants and tests relating to, among other matters, interest coverage and leverage. At December 26, 2020, the Company was in compliance with all covenants under the Senior Notes.

The Company may redeem the Senior Notes upon the satisfaction of certain conditions and the payment of a make-whole amount to noteholders, and are required to offer to repurchase the Senior Notes at par following certain events, including a change of control.

Debt Issuance Costs

During fiscal year 2020, the Company paid debt issuance costs of \$1.8 million in relation to the amended the Credit Agreement on April 3, 2020 which, along with the remaining balance of debt issuance costs of the previous credit facility, are being amortized over the life of the amended Credit Agreement.

The Company paid debt issuance costs of \$0.9 million in relation to the \$175 million Note Purchase Agreement that was entered on November 15, 2017 during fiscal year 2018.

Debt Maturities

Scheduled maturities of the Company's long-term debt for each of the five years succeeding December 26, 2020 and thereafter are summarized as follows:

(in thousands)	Scheduled Maturities
2021	\$ —
2022	27,619
2023	142,679
2024	_
2025	180,000
2026 and thereafter	340,850
	\$ 691,148

10. Fair Value of Assets and Liabilities

For assets and liabilities measured at fair value on a recurring and nonrecurring basis, a three-level hierarchy of measurements based upon observable and unobservable inputs is used to arrive at fair value. Observable inputs are developed based on market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions about valuation based on the best information available in the circumstances. Depending on the inputs, the Company classifies each fair value measurement as follows:

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

Level 2—Valuations based upon quoted prices for similar instruments, prices for identical or similar instruments in markets that are not active, or model-derived valuations, all of whose significant inputs are observable, and

Level 3—Valuations based upon one or more significant unobservable inputs.

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

Cash Equivalents

Cash equivalents primarily consist of money market funds, which are held with an institution with sound credit rating and are highly liquid. The Company classified cash equivalents as Level 1 and are valued at cost, which approximates fair value.

Investments in Equity Securities

Investments in equity securities listed on a national market or exchange are valued at the last sales price and classified within Level 1 of the valuation hierarchy. Such securities are further detailed in Note 1, Summary of Significant Accounting Policies and Other Information.

Other Investments

The Company has certain convertible debt and convertible preferred stock investments that are accounted for under the cost method reflected in *Investments* and *Other assets* in the Consolidated Balance Sheets. During the fiscal year ended December 26, 2020 and December 28, 2019, the Company recorded impairment charges of \$0.1 million and \$7.3 million, respectively, in *Other income, net* in the Consolidated Statements of Net Income to adjust these certain investments to their estimated fair value. As of December 26, 2020 and December 28, 2019, the balances of these investments were \$0.5 million and \$0.4 million, respectively. The fair value of these investments are measured on a nonrecurring basis using Level 3 inputs under the fair value hierarchy. The Company's accounting and finance management determines the valuation policies and procedures for Level 3 fair value measurements and is responsible for the development and determination of unobservable inputs.

Defined Benefit Plan Assets / Non-qualified Supplemental Retirement and Savings Plan Investments

See Note 11, *Benefit Plans*, for description of valuation methodologies and investment balances for defined benefit plan assets and investments related to the Company's Non-Qualified Supplemental Retirement and Savings Plan.

Foreign currency exchange forward contract

There were no changes during 2020 to the Company's valuation techniques used to measure asset and liability fair values on a recurring basis. On October 30, 2019, the Company entered a foreign currency exchange forward contract to mitigate the currency fluctuation risk between the Chinese renminbi and U.S dollar. The foreign currency contract was not designated as a hedge instrument and was marked to market on a monthly basis. The notional value of the forward contracts at December 28, 2019 was \$16.0 million and expired on May 5, 2020. On March 23, 2020, the Company unwound the foreign currency exchange forward contract entered on October 30, 2019 and recognized a gain of \$0.2 million within *Other income, net* during the fiscal year 2020. The fair value of the foreign currency forward contract was valued using market exchange rates and classified as a Level 2 input under the fair value hierarchy. As of December 26, 2020 and December 28, 2019, the Company held no non-financial assets or liabilities that are required to be measured at fair value on a recurring basis.

The following table presents assets measured at fair value by classification within the fair value hierarchy as of December 26, 2020:

	Fair V				
(in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Cash Equivalents	\$ 73,	461 5	\$	\$	\$ 73,461
Investments in equity securities	19,	186	_		19,186
Mutual funds	13,	249	<u> </u>		13,249
Total:	\$ 105,	896	<u> </u>	<u>\$</u>	\$ 105,896

The following table presents assets measured at fair value by classification within the fair value hierarchy as of December 28, 2019:

	Fair Value Measurements Using						
(in thousands)	Active M Identic	Prices in Tarkets for al Assets vel 1)	Signifi Oth Observ Inpu (Leve	er vable uts	Unobse Inp	ficant ervable outs vel 3)	Total
Cash Equivalents	\$	118,999	\$		\$		\$ 118,999
Investments in equity securities		12,969				_	12,969
Mutual funds		10,464					10,464
Total:	\$	142,432	\$		\$		\$ 142,432

In addition to the methods and assumptions used for the financial instruments recorded at fair value as discussed above, the following methods and assumptions are used to estimate the fair value of other financial instruments that are not marked to market on a recurring basis. The Company's other financial instruments include cash and cash equivalents, short-term investments, trade receivables and its long-term debt. Due to their short-term maturity, the carrying amounts of cash and cash equivalents, short-term investments and trade receivables approximate their fair values. The Company's revolving and term loan debt facilities' fair values approximate book value at December 26, 2020 and December 28, 2019, as the rates on these borrowings are variable in nature.

The carrying value and estimated fair values of the Company's Euro Senior Notes, Series A and Series B and USD Senior Notes, Series A and Series B, as of December 26, 2020 and December 28, 2019 were as follows:

	December 26, 2020			Decembe	r 28,	2019	
(in thousands)		Carrying Value		Estimated air Value	Carrying Value		stimated air Value
Euro Senior Notes, Series A due 2023	\$	142,679	\$	144,323	\$ 129,808	\$	131,710
Euro Senior Notes, Series B due 2028		115,850		123,588	105,400		110,336
USD Senior Notes, Series A due 2022		25,000		25,437	25,000		25,054
USD Senior Notes, Series B due 2027		100,000		109,552	100,000		102,548
USD Senior Notes, Series A due 2025		50,000		53,474	50,000		50,775
USD Senior Notes, Series B due 2030		125,000		138,036	125,000		127,701

The Company recognized impairment charges of \$1.9 million for the land and building and \$0.3 million for a certain patent as a result of the Company's announcement to consolidate a manufacturing facility within the Industrial segment during the first quarter of 2020. See Note 8, *Restructuring, Impairment and Other Charges*, for further discussion. The fair value of the land and building was valued using a real estate appraisal and classified as a Level 3 input under the fair value hierarchy.

The second quarter of 2020 goodwill impairment charge was the result of measuring a reporting unit at fair value on a nonrecurring basis as shown below:

	Fiscal Year Ended	Fiscal Year Ended December 26, 2020					
(in thousands)	Impairment Charge	Estimated Fair Value Impairment Charge Measurement (Level 3)					
Goodwill	\$33,841	\$8,953	\$	9,832			

See Note 5, Goodwill and Other Intangible Assets for further discussion regarding goodwill impairment charges.

11. Benefit Plans

The Company has Company-sponsored and mandatory defined benefit pension plans covering employees in the United Kingdom ("U.K."), Germany, the Philippines, China, Japan, Mexico, Italy and France. The amount of the retirement benefits provided under the plans is generally based on years of service and final average pay.

On April 7, 2020, the Company entered into a definitive agreement to purchase a group annuity contract, under which an insurance company will be required to directly pay and administer pension payments to certain of the Company's U.K. pension plan participants, or their designated beneficiaries. The purchase of this group annuity contract will reduce the Company's outstanding pension benefit obligation by approximately \$55 million, representing approximately 37% of the total obligations of the Company's qualified pension plans, and will be funded with pension plan assets and additional cash on hand. In connection with this transaction, the Company will record a one-time non-cash settlement charge in the second half of 2021 currently estimated between \$18 million and \$22 million, reflecting the accelerated recognition of unamortized actuarial losses in the plan. The actual settlement charge could differ from this estimate due to final data and plan wind-up expenses. Due to the signing of the group annuity contract being a significant change in one of the U.K. pension plans, the liabilities of the plan were remeasured as of April 6, 2020 resulting in an increase of \$13.4 million (£10.9 million) to both the net pension liability to bring the pension benefit obligation to the purchase price of the group annuity contract, and unamortized actuarial loss within other comprehensive income (loss) during the second quarter. Additionally, the Company made a cash contribution of \$10.4 million (£8.4 million) under this agreement during the second quarter.

Benefit plan related information is as follows for the years 2020 and 2019:

(in thousands)	2020	 2019
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 116,921	\$ 102,833
Service cost	2,462	2,040
Interest cost	2,173	3,169
Net actuarial loss	25,306	11,286
Benefits paid from the plan assets	(2,808)	(3,323)
Benefits paid directly by the Company	(2,302)	(1,540)
Curtailments and Settlements	102	(1,924)
Effect of exchange rate movements	7,462	1,735
Plan amendment and other	(324)	2,645
Benefit obligation at end of year	\$ 148,992	\$ 116,921
Change in plan assets at fair value:		
Fair value of plan assets at beginning of year	\$ 78,502	\$ 70,676
Actual return on plan assets	7,053	8,222
Employer contributions	12,918	2,233
Benefits paid from the plan assets	(2,808)	(3,323)
Settlements		(1,072)
Effect of exchange rate movements	4,813	1,766
Fair value of plan assets at end of year	100,478	78,502
Net amount unfunded status	\$ (48,514)	\$ (38,419)

Amounts recognized in the Consolidated Balance Sheets as of December 26, 2020 and December 28, 2019 consist of the following:

(in thousands)	2020		 2019
Amounts recognized in the Consolidated Balance Sheets consist of:			
Noncurrent assets	\$	39	\$ 885
Current benefit liability		(2,751)	(1,106)
Noncurrent benefit liability		(45,802)	(38,198)
Net liability recognized	\$	(48,514)	\$ (38,419)

The amounts included in accumulated other comprehensive loss in the Consolidated Balance Sheets, excluding tax effects, that have not yet been recognized as components of net periodic benefit costs as of December 26, 2020 and December 28, 2019 were as following:

(in thousands)		2020		2020		2019
Net actuarial loss	\$	37,285	\$	15,635		
Prior service cost		3,937		4,273		
Total	\$	41,222	\$	19,908		

The pre-tax amounts recognized in other comprehensive income (loss) in 2020 as components of net periodic benefit costs were as follows:

(in thousands)	 2020
Amortization of:	
Prior service cost	\$ 181
Net actuarial loss	782
Amount arising during the period:	
Prior service cost	324
Net actuarial loss	(19,861)
Net settlement loss	236
Foreign currency adjustments	 (1,298)
Total	\$ (19,636)

Due to the signing of the group annuity contract being a significant change in this U.K. pension plan, the liabilities of the plan were remeasured as of April 6, 2020 resulting in an increase of \$13.4 million to unamortized actuarial loss within other comprehensive income (loss). In addition, the net actuarial loss and increase in benefit obligation arising during 2020 and 2019 were also impacted by lower discount rates in both 2020 and 2019 compared to previous years and changes in foreign exchange rates.

The components of net periodic benefits costs for the fiscal years 2020, 2019, and 2018 are as follows:

(in thousands)	 2020 2019			2018		
Components of net periodic benefit cost:						
Service cost	\$ 2,462	\$	2,040	\$	2,266	
Interest cost	2,173		3,169		3,104	
Expected return on plan assets	(1,972)		(3,187)		(3,222)	
Amortization of prior service and net actuarial loss	963		243		291	
Net periodic benefit cost	3,626		2,265		2,439	
Net settlement loss	236		260		238	
Total expense for the year	\$ 3,862	\$	2,525	\$	2,677	

Weighted average assumptions used to determine net periodic benefit cost for the fiscal years 2020, 2019, and 2018 are as follows:

	2020	2019	2018
Discount rate	2.3 %	3.1 %	2.8 %
Expected return on plan assets	3.7 %	4.5 %	4.2 %
Compensation increase rate	4.7 %	4.6 %	5.0 %

The accumulated benefit obligation for the plans was \$137.7 million and \$111.3 million at December 26, 2020 and December 28, 2019, respectively.

The following table provides a summary of under-funded or unfunded pension benefit plans with projected benefit obligations in excess of plan assets as of December 26, 2020 and December 28, 2019:

(in thousands)	2020		2019
Projected benefit obligation	\$	148,992	\$ 81,362
Fair value of plan assets		100,439	42,058

The following table provides a summary of under-funded or unfunded pension benefit plans with accumulated benefit obligations in excess of plan assets as of December 26, 2020 and December 28, 2019:

(in thousands)		2020	2019		
Accumulated benefit obligation	\$	130,453	\$ 75,744		
Fair value of plan assets		92,248	42,058		

Weighted average assumptions used to determine benefit obligations as of December 26, 2020, December 28, 2019 and December 29, 2018 are as follows:

	2020	2019	2018
Discount rate	1.2 %	2.3 %	3.1 %
Compensation increase rate	4.9 %	4.7 %	4.6 %

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

(in thousands)	Expected Benefit Payments
2021	\$ 6,562
2022	4,718
2023	4,902
2024	4,742
2025	5,357
2026-2030 and thereafter	31,164

The Company expects to make approximately \$2.2 million of contributions to the plans and pay \$3.8 million of benefits directly in 2021.

The Company also sponsors certain post-employment plans in foreign countries and other statutory benefit plans. For the fiscal year ended December 26, 2020, December 28, 2019, and December 29, 2018, the Company recorded \$2.0 million, \$1.4 million, \$1.8 million expense, respectively, in *Cost of Sales* and *Other income, net* within the Consolidated Statements of Net Income. As of December 26, 2020 and December 28, 2019, the Company reported benefit liabilities of \$3.5 million and \$2.8 million for these plans, of which \$1.2 million and \$0.9 million was recorded in *Accrued liabilities* and \$2.3 million and \$1.9 million was recorded in *Other long-term liabilities* on the Consolidated Balance Sheets, respectively. For fiscal year ended December 26, 2020 and December 28, 2019, the pre-tax amounts recognized in other comprehensive income (loss) as components of net periodic benefit costs for these plans were \$0.1 million and \$0.6 million, respectively.

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 3.7% on 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:

	Asset Allo	cation
	2020	2019
Cash and cash equivalents, and other	7 %	1 %
Equity securities	9 %	27 %
Fixed income securities	31 %	72 %
Bulk annuity contract	53 %	%
	100 %	100 %

The Company segregated its plan assets by the following major categories and level for determining their fair value as of December 26, 2020 and December 28, 2019. All plan assets that are valued using the net asset value per share ("NAV") practical expedient have not been included within the fair value hierarchy but are separately disclosed.

Cash and cash equivalents – Carrying value approximates fair value. As such, these assets were classified as Level 1. The Company also invests in certain short-term investments which are valued using the amortized cost method and at NAV. Lastly, the Company has certain pooled pension funds that have short-term investments with third party mutual funds that are valued at unit value per share at measurement date. As such, these assets were classified as Level 2.

Equity – The values of individual equity securities were based on quoted prices in active markets. As such, these assets are classified as Level 1. The Company has certain pooled pension funds which have mutual funds with underlying investments in certain equity securities that are not quoted on active markets; therefore, they were classified as Level 2.

Fixed income – Fixed income securities are typically priced based on a last trade basis and are exchange-traded. Accordingly, the Company classified fixed income securities as Level 1. The Company has certain pooled pension funds which have mutual funds with underlying investments in fixed income securities and funds priced based on a valuation model rather than a last trade basis and are not exchange-traded. As such, they were classified as Level 2. The Company also invests in certain fixed income funds which are valued at NAV.

Insurance Contracts and other – This category includes pooled pension funds which have mutual funds with underlying investments in other assets and liabilities including alternatives priced based on a valuation model and are not exchange-traded. These were classified as Level 2. This category includes also insurance contracts that are valued by the re-insurer with the valuation inputs being not highly observable or traded on an open market. Accordingly, insurance contracts was categorized as Level 3. Lastly, this category includes other assets and liabilities including futures or swaps valued at NAV.

Bulk Annuity Contract – Bulk annuity contract includes a U.K insurance policy issued by an authorized U.K. life insurer. This bulk annuity contract is valued by the re-insurer with the valuation inputs being not highly observable or traded on an open market. Accordingly, this contract was categorized as Level 3.

For any Level 2 and Level 3 plan assets, management reviews significant investments on a periodic basis including investigation of unusual fluctuations in price or returns and obtaining an understanding of the pricing methodology to assess the reliability of third-party pricing estimates.

The valuation methodologies described above may generate a fair value calculation that may not be indicative of net realizable value or future fair values. While the Company believes the valuation methodologies used are appropriate, the use of different methodologies or assumptions in calculating fair value could result in different amounts. The Company invests in assets in which valuation is determined by NAV. The Company believes that the NAV is representative of fair value at the reporting date, as there are no significant restrictions on redemption of these investments or other reasons to indicate that the investment would be redeemed at an amount different than the NAV.

The following table presents the Company's pension plan assets measured at fair value by classification within the fair value hierarchy as of December 26, 2020:

		Fair Value Measurements Using							
(in thousands)	Level 1			Level 2	Level 3		NAV		Total
Insurance contracts and other	\$	_	\$	1,880	\$	685	\$	_	\$ 2,565
Cash and cash equivalents		654		3,868		_			4,522
Equities		1,719		6,904		_		_	8,623
Fixed income		6,164		19,433		_		6,078	31,675
Bulk annuity contract						53,093		<u> </u>	53,093
Total pension plan assets	\$	8,537	\$	32,085	\$	53,778	\$	6,078	\$ 100,478

The following table presents the Company's pension plan assets measured at fair value by classification within the fair value hierarchy as of December 28, 2019:

		Fair Val	ue l									
(in thousands)	Level 1			Level 2 Leve			Level 3 NAV			Total		
Equities	\$	1,796	\$	_	\$	_	\$	19,139	\$	20,935		
Fixed income		4,535						51,711		56,246		
Insurance contracts and other		_		_		609		147		756		
Cash and cash equivalents		387				_		178		565		
Total pension plan assets	\$	6,718	\$		\$	609	\$	71,175	\$	78,502		

The fair value measurement of plan assets using significant unobservable inputs (Level 3) changed during 2020 due to the following:

(in thousands)	I	Level 3
Balance at December 28, 2019	\$	609
Level 3 assets transferred in from Level 1 and 2 assets valued at NAV:		
Bulk annuity contract added during the year		53,093
Actual return on plan assets		76
Balance at December 26, 2020	\$	53,778

Defined Contribution Plan

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. The Company may provide an additional discretionary match to participants and made discretionary matches of 2% of the employee's eligible compensation for each of the fiscal year ended December 26, 2020, December 28, 2019 and December 29, 2018. Employees are immediately vested in their contributions plus actual earnings thereon, as well as the Company contributions. Company matching contributions amounted to \$4.6 million, \$5.6 million, and \$4.5 million in 2020, 2019, and 2018, respectively.

Non-qualified Supplemental Retirement and Savings Plan

The Company has a non-qualified Supplemental Retirement and Savings Plan which provides additional retirement benefits for certain management employees and named executive officers by allowing participants to defer a portion of their annual compensation. The Company maintains accounts for participants through which participants make investment elections. The investments are subject to the claims of the Company's creditors and the Company is responsible for the payment of all benefits under the plan from its general assets. As of December 26, 2020, there was \$13.2 million of marketable securities related to the plan included in *Other assets* and \$13.2 million of accrued compensation benefits included in *Other long-term liabilities*. The marketable securities are classified as Level 1 under the fair value hierarchy as they are maintained in mutual funds with readily

determinable fair value. The Company made matching contributions to the plan of \$0.5 million, \$0.4 million, and \$0.4 million in 2020, 2019, and 2018, respectively.

12. Stock-Based Compensation

Equity Plans: The Company has equity-based compensation plans authorizing the granting of stock options, restricted shares, restricted share units, and other stock rights to employees and directors. As of December 26, 2020, there were 0.9 million shares available for issuance of future awards under the Company's equity-based compensation plans.

Stock options generally 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 generally vest over three to four years. Stock options and restricted share units may have accelerated vesting upon meeting certain qualified conditions.

Upon completion of the IXYS acquisition, IXYS outstanding options were assumed by the Company and converted into options of 499,027 shares. The Company recognized approximately \$11.9 million of stock compensation expense related to IXYS stock options converted to Littelfuse stock options during the fiscal year ended December 29, 2018, of which \$4.5 million was recognized immediately as it related to prior service periods. See Note 2, *Acquisitions and Dispositions*, for further discussion.

The following table provides a reconciliation of outstanding stock options for the fiscal year ended December 26, 2020.

	Weighted Shares Under Option Price		Average	Weighted Average Remaining Contract Life (Years)	 Aggregate Intrinsic Value (000's)
Outstanding December 28, 2019	600,465	\$	131.32		
Granted	297,954		152.86		
Exercised	(209,093)		104.18		
Forfeited	(22,377)		173.95		
Outstanding December 26, 2020	666,949		148.01	5.1	\$ 69,126
Exercisable December 26, 2020	296,409		133.00	3.7	35,172

The following table provides a reconciliation of non-vested restricted share and share unit awards ("RSU") for the fiscal year ended December 26, 2020.

	Shares	Weighted Average Grant-Date Fair Value
Nonvested December 28, 2019	134,136	\$ 185.86
Granted	115,349	130.14
Vested	(68,550)	177.78
Forfeited	(8,933)	175.38
Nonvested December 26, 2020	172,002	152.25

The total intrinsic value of options exercised during 2020, 2019, and 2018 was \$20.6 million, \$12.5 million, and \$38.3 million, respectively. The total fair value of the vested RSU shares was \$9.5 million, \$15.5 million, and \$20.8 million for 2020, 2019, and 2018, respectively. The total amount of share-based liabilities paid was \$0.5 million, \$0.9 million and \$1.1 million for 2020, 2019, and 2018, 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 December 26, 2020, the unrecognized compensation cost for options and restricted shares was \$22.6 million before tax, and will be recognized over a weighted average period of 2.0 years. Compensation cost included as a component of cost of sales, research and development and selling, general, and administrative expenses for all equity

compensation plans discussed above was \$19.1 million, \$19.9 million, and \$28.2 million for 2020, 2019, and 2018, respectively. The total related income tax benefit recognized in the Consolidated Statements of Net Income was \$3.1 million, \$3.3 million and \$6.0 million for 2020, 2019, and 2018, respectively.

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

	2020	2019	2018
Weighted average fair value of options granted	\$38.09	\$47.63	\$45.19
Assumptions:			
Risk-free interest rate	0.30%	2.33%	2.79%
Expected dividend yield	1.27%	0.86%	0.77%
Expected stock price volatility	33.0%	27.0%	25.0%
Expected life of options (years)	4.7	4.4	4.4

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. Historical nonvested forfeiture information is the basis for the forfeiture rate assumptions.

The fair value of RSU is determined based on the Company's stock price on the grant date reduced by the present value of expected dividends through the vesting period.

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.

Share Repurchase Program

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, 2018 to April 30, 2019 ("2018 program"). On April 26, 2019, the Company's Board of Directors authorized to a program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2019 to April 30, 2020 ("2019 program") to replace its previous expired 2018 program. On April 23, 2020, the Company's Board of Directors authorized a new program to repurchase up to 1,000,000 shares of the Company's common stock for the period May 1, 2020 to April 30, 2021 (the "2020 program") to replace its previous expired 2019 program. There are 1,000,000 shares remaining available for purchase under the 2020 program as of December 26, 2020.

During the fiscal year 2020, 2019, and 2018, the Company repurchased 175,110, 579,916, and 391,972 shares of its common stock totaling \$22.9 million, \$95.0 million, and \$67.9 million, respectively.

13. Other Comprehensive Income (Loss)

Changes in other comprehensive income (loss) by component for fiscal years 2020, 2019, and 2018 were as follows:

	Fiscal Year Ended										
	Decei	mber 26,	2020	Dece	mber 28,	2019	December 29, 2018				
(in thousands)	Pre-tax	Tax	Net of tax	Pre-tax	Tax	Net of tax	Pre-tax	Tax	Net of tax		
Defined benefit pension plan and other adjustments	\$ (19,513)	\$3,418	\$(16,095)	\$ (9,149)	\$ 1,062	\$ (8,087)	\$ 924	\$ (47)	\$ 877		
Foreign currency translation adjustments (1)	34,707	(2,946)	31,761	(1,476)	664	(812)	(25,338)	_	(25,338)		
Total change in other comprehensive (loss) income	\$ 15,194	\$ 472	\$ 15,666	\$(10,625)	\$ 1,726	\$ (8,899)	\$(24,414)	\$ (47)	\$(24,461)		

⁽¹⁾ The tax shown above within the *foreign currency translation adjustments* is the U.S. tax associated with the foreign currency translation adjustments of earnings of non-U.S. subsidiaries which have been previously taxed in the U.S. and are not permanently reinvested.

Accumulated Other Comprehensive Income (Loss) ("AOCI"): The following table sets forth the changes in the components of AOCI by component for fiscal years 2020, 2019, and 2018:

(in thousands)	posti liak recla	nsion and retirement pility and assification ustments	Gain (loss) on investments	tr	Foreign currency canslation justments	cor	ccumulated other nprehensive come (loss)
Balance at December 30, 2017	\$	(10,836)	\$ 9,795	\$	(62,627)	\$	(63,668)
Cumulative effect adjustment (a)		_	(9,795)				(9,795)
2018 activity		877			(25,338)		(24,461)
Balance at December 29, 2018		(9,959)			(87,965)		(97,924)
2019 activity		(8,087)			(812)		(8,899)
Balance at December 28, 2019		(18,046)			(88,777)		(106,823)
2020 activity		(16,095)			31,761		15,666
Balance at December 26, 2020		(34,141)			(57,016)		(91,157)

⁽a) The Company adopted ASU 2016-01 on December 31, 2017 on a modified retrospective basis, recognizing the cumulative effect as a \$9.8 million increase to retained earnings. See Note 1, *Summary of Significant Accounting Policies and Other Information*, for further discussion.

Due to the signing of the group annuity contract being a significant change in the U.K. pension plan, the liabilities of the plan were remeasured as of April 6, 2020 resulting in an increase of \$13.4 million to unamortized actuarial loss within other comprehensive income (loss). See Note 11, *Benefits Plans* for further discussion.

Amounts reclassified from accumulated other comprehensive income (loss) to earnings for fiscal years 2020, 2019, and 2018 were as follows:

	Fiscal Year Ended									
(in thousands)		mber 26, 2020	Dec	ember 28, 2019	December 29, 2018					
Pension and postemployment and other plans:										
Amortization of prior service, net actuarial loss, and other	\$	1,694	\$	372	\$	291				
Net settlement loss		236		260		238				
Total	\$	1,930	\$	632	\$	529				

The Company recognizes the amortization of prior service costs and settlement loss and curtailment gain in *other income, net* within the Consolidated Statements of Net Income.

14. Income Taxes

On December 22, 2017, the U.S. enacted legislation referred to as the "Tax Act". Among other things, the Tax Act reduced the U.S. corporate federal income tax rate from 35% to 21%, added base broadening provisions which limit deductions and address excessive international tax planning, imposed a Toll Charge on accumulated earnings of certain non-U.S. subsidiaries and enabled repatriation of earnings of non-U.S. subsidiaries free of U.S. federal income tax.

In the fourth quarter of 2018, within the measurement period outlined in SEC SAB No. 118, the Company finalized its estimates of the impact of the Tax Act and recorded a charge of \$3.2 million, including \$2.3 million for the Toll Charge and \$0.9 million for the net impact of other items. In addition, the Company recorded \$7.0 million for the Toll Charge associated with IXYS as part of the IXYS acquisition purchase price allocation. This was reflected in the opening balance sheet as an increase to goodwill and other long-term liabilities.

The Company elected to pay the 2017 Littelfuse Toll Charge over the eight-year period prescribed by the Tax Act. The long-term portion of this Toll Charge which remains payable as of December 26, 2020, totaling \$20.8 million, is recorded in *Other long-term liabilities*, and the anticipated 2021 annual installment payment of \$3.0 million is included in *Accrued income taxes*, on the Consolidated Balance Sheet as of December 26, 2020. The Company did not elect to pay the 2018 IXYS Toll Charge over the eight year period provided by the Tax Act and therefore there is no 2018 IXYS Toll Charge which remains payable as of December 26, 2020.

One of the base broadening provisions of the Tax Act is commonly referred to as the "GILTI" provisions. In accordance with guidance issued by the FASB staff, the Company has adopted an accounting policy to treat any GILTI inclusions as a period cost if and when incurred. Thus, for the fiscal years ended December 26, 2020, December 28, 2019 and December 29, 2018, deferred taxes were computed without consideration of the possible future impact of the GILTI provisions, and any current year impact was recorded as a part of the current portion of income tax expense.

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

(in thousands)	2020	2019	2018		
Domestic	\$ (16,732)	\$ (11,970)	\$	(49,995)	
Foreign	177,985	 177,854		254,937	
Income before income taxes	\$ 161,253	\$ 165,884	\$	204,942	

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

(in thousands)	2020	2019	2018		
Current:					
Federal	\$ 437	\$ (3,495)	\$	(3,193)	
State	203	834		119	
Foreign	33,841	30,610		48,130	
Subtotal	34,481	27,949		45,056	
Deferred:					
Federal and State	(5,354)	1,839		(3,896)	
Foreign	2,140	(2,986)		(783)	
Subtotal	(3,214)	(1,147)		(4,679)	
Provision for income taxes	\$ 31,267	\$ 26,802	\$	40,377	

The current federal tax benefit for 2019 includes a benefit of \$3.3 million from the recognition of previously unrecognized tax benefits (and the reversal of the related accrued interest) due to a lapse in the statute of limitations.

The current federal tax benefit for 2018 includes the benefit of current year losses (which served to partially offset the amount of the IXYS Toll Charge that would otherwise have been payable).

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)		2020	2019		2018
Tax expense at statutory rate of 21%	\$	33,863	\$ 34,	,836	\$ 43,038
Non-U.S. income tax rate differential		(19,730)	(22,	(457)	(20,472)
Tax impact of non-deductible goodwill impairment charge		5,642		_	_
Tax on unremitted earnings		3,955	2,	,136	4,660
Net impact associated with the GILTI tax provisions		3,731	6,	469	5,075
Non-U.S. losses and expenses with no tax benefit		2,774	6,	,570	3,107
Certain changes in unrecognized tax benefits and related accrued interest		2,160	(1,	,468)	208
State and local taxes, net of federal tax benefit		(584)	1,	,080	(1,238)
Nondeductible professional fees		236		195	1,001
2017 Toll Charge (2018 adjustment)		_			2,278
Provisional Tax Act impact other than Toll Charge (2018 adjustment)		_		_	966
Other, net	_	(780)	((559)	1,754
Provision for income taxes	\$	31,267	\$ 26,	,802	\$ 40,377

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 December 26, 2020 and December 28, 2019, are as follows:

(in thousands)	2020		2019
Deferred tax assets:			
Accrued expenses and reserves	\$ 31,12	3 \$	28,294
Domestic and non-U.S. net operating loss carryforwards	24,76	3	10,511
Non-U.S. interest expense carryforwards	10,35	2	5,324
U.S. research credit carryforwards	3,72	4	2,581
Capitalized expenses	4,17	8	2,400
U.S. foreign tax credit carryforwards	77	2	1,320
Other	11	7	1,261
Gross deferred tax assets	75,02	9	51,691
Less: Valuation allowance	(13,13	1)	(5,957)
Total deferred tax assets	61,89	8	45,734
Deferred tax liabilities:			
Excess of book basis over the tax basis for intangible assets and goodwill	76,47	2	71,229
Tax on unremitted earnings	14,22	3	12,968
Unrealized foreign currency exchange gains	5,71	9	_
Excess of book basis over the tax basis for property, plant, and equipment	4,39	4	3,231
Total deferred tax liabilities	100,80	8	87,428
Net deferred tax liabilities	\$ 38,91	0 \$	41,694

The deferred tax asset valuation allowance is related to certain non-U.S. net operating loss and non-U.S. interest expense carryforwards which are not expected to be realized. The remaining U.S. and non-U.S. net operating loss and non-U.S. interest expense carryforwards either have no expiration date or are expected to be utilized prior to expiration. No deferred tax asset nor valuation allowance has been recorded for certain U.S. and non-U.S. net operating loss carryforwards for which the possibility of usage has been determined to be remote.

The Company paid income taxes of \$35.2 million, \$47.6 million, and \$46.2 million in 2020, 2019, and 2018, respectively, and received income tax refunds of \$7.6 million, \$7.1 million, and \$4.3 million in 2020, 2019, and 2018, respectively.

Deferred income taxes are not provided on the excess of the investment value for financial reporting over the tax basis of investments in those non-U.S. subsidiaries for which such excess is considered to be permanently reinvested in those operations. The Company believes the determination of the amount of such deferred income taxes is impractical as it would depend upon income tax laws and circumstances at the time of the hypothetical distributions or dispositions. As of December 26, 2020, unremitted earnings of the Company's non-U.S. subsidiaries was approximately \$767 million. A distribution of such earnings will generally not be subject to U.S. federal income tax. The Company recognized deferred tax liabilities of \$14.2 million (\$13.9 million for non-U.S. taxes net of related U.S. foreign tax credits, and \$0.3 million for U.S. state taxes) as of December 26, 2020 and \$13.0 million (\$12.6 million for non-U.S. taxes net of related U.S. foreign tax credits, and \$0.4 million for U.S. state taxes) as of December 28, 2019, related to taxes on certain non-U.S. earnings which are not considered to be permanently reinvested. Some of these non-U.S. taxes will provide a U.S. federal income tax benefit as a foreign tax credit, and the amounts as of December 26, 2020 and December 28, 2019 are net of such benefit.

The Company has two subsidiaries in China which benefit from lowered income tax rates due to "tax holidays" which apply for three-year periods, subject to extension. The tax holiday for one of these subsidiaries expired at the end of 2020, and it will seek an extension. Such tax holidays contributed \$4.1 million in tax benefits, or \$0.17 per diluted share, during 2020. Future year tax benefits will depend upon the Company's ability to obtain extensions, and the level of income earned by the two applicable subsidiaries.

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of December 26, 2020, December 28, 2019, and December 29, 2018 is as follows:

(in thousands)	ecognized K Benefits
Balance at December 29, 2018	\$ 18,259
Additions for tax positions taken in the current year	1,305
Decreases due to a lapse in the statute of limitations	(2,758)
Other	(85)
Balance at December 28, 2019	16,721
Additions for tax positions taken in the current year	700
Decreases due to a lapse in the statute of limitations	(103)
Other	 119
Balance at December 26, 2020	17,437

The company recognizes accrued interest and penalties associated with uncertain tax positions as part of income tax expense. The company recognized such interest expense of \$1.6 million, \$1.3 million (net of a \$0.6 million decrease due to a lapse in the statute of limitations), and \$1.5 million (net of a \$0.3 million decrease due to a lapse in the statute of limitations) in 2020, 2019, and 2018, respectively. Accrued interest for such matters included in *Other long-term liabilities* within the Consolidated Balance Sheets was \$8.8 million and \$7.2 million as of December 26, 2020 and December 28, 2019, respectively.

The amount of unrecognized tax benefits included in *Other long-term liabilities* within the Consolidated Balance Sheets was \$17.4 million and 16.7 million as of December 26, 2020 and December 28, 2019, respectively. The December 26, 2020 total represents the net amount of tax benefits that, if recognized, would favorably affect the effective tax rate in future periods. Of this amount, only an insignificant amount may be recognized in 2021 based upon the possible lapse in the statute of limitations. 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 the Company for the 2017 tax year and later years. The U.S. federal statute of limitations remains open for the IXYS pre-acquisition tax period ending January 17, 2018. Non-U.S. and U.S. state statutes of limitations generally range from three to seven years, although certain jurisdictions do not have a statute expiration. Non-U.S. tax examinations occur from time to time, including examinations currently in process in Italy, the Philippines, and Hong Kong. The company does not expect to recognize a significant amount of additional tax expense as a result of concluding these examinations. The Company has been informed that it will receive a notice of assessment from the Canadian tax authorities as a consequence of concluding their recent audit. Although the exact amount of the assessment is not known, it is estimated to approximate \$3 million. The Company believes the assessment is in error and intends to appeal. The Company does not expect to recognize a significant amount of additional tax expense upon conclusion of such appeal.

15. Earnings Per Share

The following table sets forth the computation of basic and diluted earnings per share:

(in thousands, except per share amounts)	2020	2019	2018
Numerator:			
Net income as reported	\$ 129,986	\$ 139,082	\$ 164,565
Denominator:			
Weighted average shares outstanding			
Basic	24,371	24,576	24,870
Effect of dilutive securities	221	242	365
Diluted	24,592	24,818	25,235
Earnings Per Share:			
Basic earnings per share	\$ 5.33	\$ 5.66	\$ 6.62
Diluted earnings per share	\$ 5.29	\$ 5.60	\$ 6.52

Potential shares of common stock attributable to stock options and restricted shares excluded from the earnings per share calculation because their effect would be anti-dilutive were 222,526, 129,658, and 42,305 shares in 2020, 2019, and 2018, respectively.

On January 17, 2018, the Company acquired IXYS through a combination of cash, Littelfuse common stock, and the value of converted, or cash settled IXYS equity awards. The Company issued approximately 2.1 million shares of Littelfuse common stock and converted IXYS equity awards into approximately 0.5 million Littelfuse equity awards.

During the fiscal year 2020, 2019, and 2018, the Company repurchased 175,110, 579,916, and 391,972 shares of its common stock totaling \$22.9 million, \$95.0 million, and \$67.9 million, respectively. See Note 12 *Stock-Based Compensation* for further discussion.

16. Segment Information

The Company and its subsidiaries design, manufacture and sell components and modules for circuit protection, power control and sensing throughout the world. The Company reports its operations by the following segments: Electronics, Automotive, and Industrial. 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 CODM allocates resources to and assesses the performance of each operating segment using information about its revenue and operating income (loss) before interest and taxes, 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. Purchasing, logistics, customer service, finance, information technology, and human resources are shared functions that are allocated back to the three operating segments. The Company does not report inter-segment revenue because the operating segments do not record it. Certain expenses, determined by the CODM to be strategic in nature and not directly related to segments current results, are not allocated but identified as "Other". Additionally, the Company does not allocate interest and other income, interest expense, or taxes to operating segments. These costs are not allocated to the segments, as management excludes such costs when assessing the performance of the segments. Although the CODM uses operating income (loss) 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.

Electronics Segment: Consists of one of the broadest product offerings in the industry, including fuses and fuse
accessories, positive temperature coefficient ("PTC") resettable fuses, polymer electrostatic discharge ("ESD")
suppressors, varistors, reed switch based magnetic sensing, gas discharge tubes; semiconductor products such as
discrete transient voltage suppressor ("TVS") diodes, TVS diode arrays, protection and switching thyristors, metal-

oxide-semiconductor field effect transistors ("MOSFETs") and silicon carbide diodes; and insulated gate bipolar transistors ("IGBT") technologies. The segment covers a broad range of end markets, including industrial motor drives and power conversion, automotive electronics, electric vehicle and related infrastructure, power supplies, data centers and telecommunications, medical devices, alternative energy, building and home automation, appliances, and mobile electronics.

- Automotive Segment: Consists of a wide range of circuit protection, power control and sensing technologies for global original equipment manufacturers ("OEMs"), Tier-I suppliers and parts distributors in passenger car, heavy duty truck, off-road vehicles, material handling, agricultural, construction and other commercial vehicle end markets. Passenger car fuse products for internal combustion engine, hybrid and electric vehicles including blade fuses, battery cable protectors, resettable fuses, high-current fuses, and high-voltage fuses. Commercial vehicle products include fuses, switches, relays, and power distribution modules used in applications serving a number of end markets, including heavy truck, construction, agriculture and material handling. Automotive sensor products include a wide range of automotive and commercial vehicle products designed to monitor the passenger compartment occupant's safety and environment as well as the vehicle's powertrain.
- Industrial Segment: Consists of power fuses, protection relays and controls, temperature sensor and other circuit protection products for use in various industrial applications such as oil, gas, mining, renewables and energy storage, electric vehicle infrastructure, non-residential construction, HVAC systems, industrial safety, power conversion, elevators and other industrial equipment.

The Company has provided this segment information for all comparable prior periods. Segment information is summarized as follows:

(in thousands)		2020		2019		2018
Net sales						
Electronics	\$	937,762	\$	961,080	\$	1,124,296
Automotive		395,764		428,533		479,791
Industrial		112,169		114,260		114,381
Total net sales	\$	1,445,695	\$	1,503,873	\$	1,718,468
Denga intim and amountination						
Depreciation and amortization	Ф	(2.702	Ф	(0.245	Ф	(1.770
Electronics	\$	62,702	\$	60,345	\$	61,779
Automotive		28,995		27,922		23,333
Industrial		4,481		4,236		5,661
Other						12,420
Total depreciation and amortization	\$	96,178	\$	92,503	\$	103,193
Operating income (loss)						
Electronics	\$	152,695	\$	145,594	\$	241,426
Automotive	*	41,655	•	46,719	•	54,982
Industrial		11,996		22,407		17,335
Other ^(a)		(43,974)		(21,929)		(88,694)
Total operating income		162,372		192,791		225,049
Interest expense		21,077		22,266		22,569
Foreign exchange (gain) loss		(14,875)		5,224		(863)
Other income, net		(5,083)		(583)		(1,599)
Income before income taxes	\$	161,253	\$	165,884	\$	204,942

(a) Included in "Other" Operating income (loss) for 2020 is \$2.3 million of acquisition-related and integration charges related to the IXYS acquisition and other contemplated acquisitions. In addition, there were \$41.7 million of restructuring, impairment and other charges, primarily related to the goodwill impairment charge of \$33.8 million recorded in the second quarter associated with the automotive sensors reporting unit within the Automotive segment, employee termination costs of \$5.5 million, \$2.2 million of impairment charges recorded in the first quarter associated with the announced consolidation of a

manufacturing facility within the Industrial segment and other restructuring charges of \$0.2 million. See Note 8, *Restructuring, Impairment and Other Charges*, for further discussion.

Included in "Other" Operating income (loss) for 2019 is \$8.9 million of acquisition-related and integration charges related to the IXYS acquisition and other contemplated acquisitions. In addition, there were \$13.0 million of restructuring charges primarily related to employee termination costs.

Included in "Other" Operating income (loss) for 2018 is \$88.7 million of charges primarily related to the IXYS acquisition, which include \$36.9 million of purchase accounting inventory step-up charges, \$18.7 million in acquisition-related and integration costs primarily related to legal, accounting and other expenses, \$12.4 million in backlog amortization costs, \$8.3 million of employee termination costs, impairment and other restructuring charges, and \$4.5 million in stock compensation expense recognized immediately upon close for converted IXYS options related to prior service periods and \$2.1 million change in control expense related to IXYS. In addition, there were \$5.8 million of employee termination costs, impairment and other restructuring charges and acquisition-related expenses for other contemplated acquisitions which included \$2.2 million of impairment charges primarily related to the impairment of a building and a trade name associated with the exit of the Custom business within the Industrial segment.

The Company's net sales, long-lived assets and additions to long-lived assets by country for the fiscal years ended 2020, 2019, and 2018 are as follows:

Net sales United States \$ 392,544 \$ 440,461 \$ 511,544 China 438,000 416,385 468,174 Other countries(a) 615,151 647,027 738,750 Total net sales \$ 1,445,695 \$ 1,503,873 \$ 1,718,468 Long-lived assets \$ 46,132 \$ 58,081 \$ 58,691 China 88,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 5,600 4,017 5,208 Other countries </th <th>(in thousands)</th> <th>2020</th> <th>2019</th> <th>2018</th>	(in thousands)	2020	2019	2018
China 438,000 416,385 468,174 Other countries (a) 615,151 647,027 738,750 Total net sales \$ 1,445,695 \$ 1,503,873 \$ 1,718,468 Long-lived assets United States \$ 46,132 \$ 58,081 \$ 58,691 China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 344,617 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Net sales			
Other countries (a) 615,151 647,027 738,750 Total net sales \$ 1,445,695 \$ 1,503,873 \$ 1,718,468 Long-lived assets \$ 46,132 \$ 58,081 \$ 58,691 China \$ 5,876 \$ 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 344,617 339,894 Additions to long-lived assets \$ 4,170 5,864 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	United States	\$ 392,544	\$ 440,461	\$ 511,544
Total net sales \$ 1,445,695 \$ 1,503,873 \$ 1,718,468 Long-lived assets \$ 46,132 \$ 58,081 \$ 58,691 China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	China	438,000	416,385	468,174
Long-lived assets \$ 46,132 \$ 58,081 \$ 58,691 China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Other countries ^(a)	615,151	647,027	738,750
United States \$ 46,132 \$ 58,081 \$ 58,691 China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Total net sales	\$ 1,445,695	\$ 1,503,873	\$ 1,718,468
United States \$ 46,132 \$ 58,081 \$ 58,691 China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364				
China 85,876 88,306 95,806 Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Long-lived assets			
Mexico 70,125 73,096 70,495 Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	United States	\$ 46,132	\$ 58,081	\$ 58,691
Germany 37,976 36,025 36,548 Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	China	85,876	88,306	95,806
Philippines 66,994 51,738 32,459 Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Mexico	70,125	73,096	70,495
Other countries 37,075 37,371 45,895 Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Germany	37,976	36,025	36,548
Total long-lived assets \$ 344,178 \$ 344,617 \$ 339,894 Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Philippines	66,994	51,738	32,459
Additions to long-lived assets United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Other countries	37,075	37,371	 45,895
United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Total long-lived assets	\$ 344,178	\$ 344,617	\$ 339,894
United States \$ 4,170 \$ 5,864 \$ 5,567 China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364				
China 10,074 10,400 29,286 Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Additions to long-lived assets			
Mexico 9,977 13,827 18,723 Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	United States	\$ 4,170	\$ 5,864	\$ 5,567
Germany 5,600 4,017 5,208 Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	China	10,074	10,400	29,286
Philippines 19,612 22,944 7,605 Other countries 1,775 9,314 8,364	Mexico	9,977	13,827	18,723
Other countries 1,775 9,314 8,364	Germany	5,600	4,017	5,208
	Philippines	19,612	22,944	7,605
Total additions to long-lived assets \$ 51,208 \$ 66,366 \$ 74,753	Other countries	1,775	9,314	8,364
	Total additions to long-lived assets	\$ 51,208	\$ 66,366	\$ 74,753

(a) Each country included in other countries are less than 10% of net sales.

For the year ended December 26, 2020, approximately 73% of the Company's net sales were to customers outside the United States (exports and foreign operations), including approximately 30% to China. For the year ended December 28, 2019, approximately 71% of the Company's net sales were to customers outside the U.S. (exports and foreign operations), including approximately 28% to China. For the year ended December 29, 2018, approximately 70% of the Company's net sales were to customers outside the U.S. (exports and foreign operations), including approximately 27% to China. Sales to Arrow Electronics, Inc., which were included in the Electronics, Automotive, and Industrial segments, were 10.4%, 10.7%, and 10.7%

of consolidated net sales in 2020, 2019, and 2018 respectively. No other single customer accounted for more than 10% of net sales during the last three years.

17. Selected Quarterly Financial Data (Unaudited)

The quarterly periods for 2020 are for the 13-weeks ended December 26, 2020, September 26, 2020, June 27, 2020, and March 28, 2020, respectively. The quarterly periods for 2019 are for the 13-weeks ended December 28, 2019, September 28, 2019, June 29, 2019, and March 30, 2019, respectively.

(in thousands, except per share data)

	2020							2019							
	4Q ^(a)		3Q ^{(b})		2Q ^(c)		1Q ^(d)		4Q ^(e)		3Q ^(f)		2Q ^(g)		1Q ^(h)
Net sales	\$ 400,696	\$3	91,566	\$3	307,337	\$3	346,096	\$3	38,523	\$3	61,971	\$3	97,879	\$4	05,500
Gross profit (1)	138,083	1	38,831		99,902	1	124,356	1	13,735	1	32,708	1	44,308	1	55,544
Operating income	65,014		64,558	((11,950)		44,750		32,317		47,167		52,634		60,673
Net income	58,977		55,356		(8,991)		24,644		22,654		35,647		43,792		36,989
Net income per share															
Basic	\$ 2.41	\$	2.27	\$	(0.37)	\$	1.01	\$	0.93	\$	1.46	\$	1.77	\$	1.50
Diluted	\$ 2.39	\$	2.25	\$	(0.37)	\$	1.00	\$	0.92	\$	1.44	\$	1.75	\$	1.48

- (1) The prior year gross profit amounts have been reclassified to reflect a change in classification of certain costs presented on the Company's Consolidated Statements of Income. See Note 1, Summary of Significant Accounting Policies and Other Information for further information and this change had no impact on previously reported operating income and net income amounts.
- (a) In the fourth quarter of 2020, the Company recorded \$0.7 million in acquisition-related and integration costs and \$0.8 million in restructuring, impairment and other charges.
- (b) In the third quarter of 2020, the Company recorded \$1.3 million in restructuring, impairment and other charges, \$0.3 million in acquisition-related and integration costs, and \$0.1 million of impairment charges on certain other investments.
- (c) In the second quarter of 2020, the Company recorded a goodwill impairment charge of \$33.8 million associated with the automotive sensors reporting unit within the Automotive segment, \$1.8 million in employee termination costs and other restructuring charges, \$1.8 million increase to coal mining reserve, \$0.2 million charge for an asset retirement obligation related to the disposal of a business in 2019, and \$0.1 million in acquisition-related and integration costs.
- (d) In the first quarter of 2020, the Company recorded \$4.0 million in restructuring, impairment and other charges and \$1.2 million in acquisition-related and integration costs.
- (e) In the fourth quarter of 2019, the Company recorded \$1.9 million in acquisition-related and integration costs and \$2.1 million in restructuring, impairment and other costs, and \$4.2 million impairment charges related to certain other investments, partially offset by a \$3.3 million benefit for previously unrecognized tax benefits in respect of which the statute of limitation has expired.
- (f) In the third quarter of 2019, the Company recorded \$3.2 million in acquisition-related and integration costs and \$2.5 million in restructuring and impairment charges.
- (g) In the second quarter of 2019, the Company recorded \$5.7 million in restructuring and impairment charges, \$1.5 million in acquisition-related and integration costs, and \$0.4 million costs primarily related to a sale of building and \$0.2 million impairment charges related to a certain other investment.
- (h) In the first quarter of 2019, the Company recorded \$2.8 million impairment charges to certain other investments, \$2.6 million loss on the disposal of a business, \$2.7 million in restructuring costs, \$2.4 million in acquisition-related and integration costs, and \$0.3 million gain primarily related to the final payments for the acquisition of Monolith.

18. Related Party Transactions

As a result of the Company's acquisition of IXYS, the Company has equity ownerships in various investments that are accounted for under the equity method. The following is a description of the investments and related party transactions.

Powersem GmbH: The Company owns 45% of the outstanding equity of Powersem GmbH ("Powersem"), a module manufacturer based in Germany.

EB-Tech Co., Ltd.: The Company owns approximately 19% of the outstanding equity of EB-Tech Co., Ltd. ("EB Tech"), a company with expertise in radiation technology based in South Korea.

Automated Technology (Phil), Inc.: The Company owns approximately 24% of the outstanding common shares of Automated Technology (Phil), Inc. ("ATEC"), a supplier located in the Philippines that provides assembly and test services. One member of the Company's Board of Directors serves on the Board of Directors of ATEC.

	Fiscal Year Ended													
		December 26, 2020							December 29, 201					
(in millions)	Power	rsem	EB	Tech	A	TEC	Pov	versem	EE	3 Tech	A	ATEC		
Sales to related party	\$	1.5	\$		\$		\$	0.6	\$		\$	_		
Purchase material/service from related party		2.7		_		8.7		3.2		0.4		7.9		
Accounts receivable balance		0.1		_		_		_		_				
Accounts payable balance	\$	0.1	\$	_	\$	0.2	\$	0.2	\$		\$	0.1		

Additionally, the Company has certain cost method investments in VTOOL Ltd. and Securepush Ltd. with a total book value of \$0.5 million as of December 26, 2020 and one member of the Company's Board of Directors is currently an investor and a director of VTOOL Ltd. and Securepush Ltd.

On April 26, 2019, the Company sold its subsidiary Microwave Technology, LLC. ("MWT") resulting in a loss on disposal of \$2.6 million reflected in *Other income, net* in the Consolidated Statements of Net Income. The operations of MWT were included in the Electronics segment. One member of the Company's Board of Directors is an owner of a company that purchased MWT.

19. Subsequent Events

On January 28, 2021, the Company acquired Hartland Controls, a manufacturer and leading supplier of electrical components used primarily in heating, ventilation, air conditioning (HVAC) and other industrial and control systems applications with annualized sales of approximately \$70 million. The cash purchase price for Hartland Controls was approximately \$113 million and the operations of Hartland Controls will be included in the Industrial segment.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in its reports filed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, the Company recognizes that any controls and procedures, no matter how well designed and operated, can provide only

reasonable assurance of achieving the desired control objectives, and the Company is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 15d-15(b), the Company carried out an evaluation, under the supervision and with the participation of its management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures pursuant to SEC Rule 13a-15 as of the end of the period covered by this report. Based on the foregoing, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of December 26, 2020.

Management's Report on Internal Control over Financial Reporting

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 is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rule 13a-15(f) and 15d-15(f). The Company's 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.

The Company's management, including the its Principal Executive Officer and Principal Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 26, 2020, 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 December 26, 2020, 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 December 26, 2020, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE.

Except as set forth below, the information required by this item will be contained in the Company's Proxy Statement related to our 2021 Annual Meeting of Stockholders (the "proxy statement") and is incorporated herein by reference.

Information concerning directors and nominees for director is set forth in the section titled "Proposal No. 1 Election of Directors" in the Company's proxy statement and is incorporated herein by reference.

Information concerning the Company's Audit Committee and Audit Committee financial expert is set forth in the sections titled "Board Committees" and "Director Independence; Financial Experts" in the Company's proxy statement and is incorporated herein by reference.

Information concerning the procedures by which security holders may recommend nominees to the Company's Board of Directors is set forth in the section titled "Director Nomination" in the Company's proxy statement and is incorporated herein by reference.

Information concerning compliance with Section 16 of the Securities Exchange Act of 1934 is set forth in the section titled "Delinquent Section 16(a) Reports" in the Company's proxy statement and is incorporated herein by reference.

Information regarding the Executive Officers of the Company can be found in Part I of this Annual Report on Form 10-K under the caption "Information about our Executive Officers."

Code of Ethics

The company has adopted a Code of Conduct (Code of Ethics) that applies to all of the Company's employees including the Company's Principal Executive Officer, Principal Financial Officer, Principal Accounting Officer and persons performing similar functions. It has posted the text of the Code of Conduct on its website at https://investor.littelfuse.com/corporate-governance-overview and intends to disclose on such website any amendments to, or waivers from the Code of Conduct. The company's website is not incorporated by reference into this Annual Report.

ITEM 11. EXECUTIVE COMPENSATION.

Information concerning compensation of the Company's executive officers and directors for the fiscal year ended December 26, 2020, is set forth in the sections titled "Compensation Discussion & Analysis," "Compensation Tables," "Compensation Committee Report," "CEO Pay Ratio," "Potential Payments Upon Termination or Change in Control" and "Director Compensation" in the Company's proxy statement and is incorporated herein by reference, except the section titled "Compensation Committee Report" is hereby "furnished" and not "filed" with this Annual Report on Form 10-K.

Information concerning compensation committee interlocks is set forth in the section titled "Compensation Committee Interlocks and Insider Participation" in the Company's proxy statement and is incorporated herein by reference.

COMPENSATION PLAN INFORMATION

We have two equity compensation plans that have been approved by our stockholders: the Littelfuse, Inc. Long-Term Incentive Plan that was approved by our stockholders at the April 2017 annual stockholder meeting and the Deferred Compensation Plan for Non-Employee Directors that was approved by our stockholders at the May 2005 annual stockholder meeting.

Pursuant to our acquisition of IXYS Corporation on January 17, 2018, we assumed four equity compensation plans that have not been approved by our stockholders and pursuant to which we may continue to grant equity awards: IXYS Corporation 2009 Equity Incentive Plan, IXYS Corporation 2011 Equity Incentive Plan, IXYS Corporation 2013 Equity Incentive Plan, IXYS Corporation 2016 Equity Incentive Plan (together, the "IXYS Plans"). We also assumed two expired equity compensation plans that have not been approved by our stockholders and pursuant to which we have outstanding equity awards: the Zilog, Inc. 2002 Omnibus Stock Incentive Plan and Zilog, Inc. 2004 Omnibus Stock Incentive Plan (together the "Zilog Plans"). The IXYS Corporation 2009 Equity Incentive Plan expired in June 2019 and equity awards remain outstanding under it.

Information about our equity compensation plans that were either approved or not approved by our stockholders as of December 26, 2020, is as follows:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants, and rights (1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the first column)
Equity compensation plans approved by security holders	719,991 (2)	\$157.84	699,516 (4)
Equity compensation plans not approved by security holders	129,913 (3)	\$104.49	206,617 (5)
Total	849,904	\$148.01	906,133

- (1) The weighted average exercise price does not take into account the shares issuable upon the vesting of outstanding restricted stock units, which have no exercise price.
- (2) Includes 175,819 shares reserved for issuance upon vesting of outstanding restricted stock units and 544,172 outstanding stock options granted under the Littelfuse, Inc. Long-Term Incentive Plan.
- (3) Includes 7,136 shares reserved for issuance upon vesting of outstanding restricted stock units under the IXYS Plans and 122,777 outstanding stock options granted under the IXYS Plans and Zilog Plan. Below is a brief description of the material features of the compensation plans acquired pursuant to the acquisition of IXYS Corporation.
- (4) Includes 654,869 shares that remain available for future issuance under the Littelfuse, Inc. Long-Term Incentive Plan and 44,647 shares that remain available for future issuance under the Deferred Compensation Plan for Non-Employee Directors.
- (5) Includes 11,385 shares that remain available for future issuance under the IXYS Corporation 2011 Equity Incentive Plan, 26,689 shares that remain available for future issuance under the IXYS Corporation 2013 Equity Incentive Plan, and 168,543 shares that remain available for future issuance under the IXYS Corporation 2016 Equity Incentive Plan.

IXYS Plans

In connection with the acquisition of IXYS Corporation, we assumed the IXYS Corporation 2009 Equity Incentive Plan, IXYS Corporation 2011 Equity Incentive Plan, IXYS Corporation 2013 Equity Incentive Plan, IXYS Corporation 2016 Equity Incentive Plan and outstanding unvested stock options originally granted by IXYS Corporation under the IXYS Plans that were held by continuing employees. At the time of the acquisition of IXYS Corporation, these awards were converted to Littelfuse stock options, with adjustments made to the exercise price of the stock options and the number of shares subject to stock options as agreed upon in the Acquisition Agreement. These unvested options vest in accordance with their original terms, generally vesting in equal annual installments over a four-year period from the original grant date. The options, once granted, generally expire ten years from the date of grant. Under the IXYS Plans, we may grant to former employees of IXYS Corporation or its subsidiaries restricted stock awards, RSUs, stock options and stock appreciation rights with an exercise price that is no less than the fair market value on the date of grant. Equity awards granted under the IXYS Plans following the acquisition have been on similar terms and consistent with grants made pursuant to the Littelfuse, Inc Long-Term Incentive Plan. The IXYS Corporation 2009 Equity Incentive Plan expired in June 2019 and no additional grants were made after the expiration date. As of December 26, 2020, 206,617 shares remained available for issuance under the IXYS Plans.

Zilog Plan

In connection with the acquisition of IXYS Corporation, we assumed the Zilog, Inc. 2004 Omnibus Stock Incentive Plan and outstanding stock options originally granted by IXYS Corporation under the Zilog Plan that were held by continuing employees of Zilog. At the time of the acquisition of IXYS Corporation, these awards were converted to Littelfuse stock options, with adjustments made to the exercise price of the stock options and the number of shares subject to stock options as agreed upon in the Acquisition Agreement. These options vested in accordance with their original terms, generally in equal annual installments over a four-year period from the original grant date. The options generally expire ten years from the date of grant. The Zilog 2004 Omnibus Stock Incentive Plan expired in February 2014 and no additional grants have been made thereunder. Therefore, as of December 26, 2020, no shares remain available for issuance of new awards under the Zilog Plan and 20,499 stock options remain outstanding.

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

Information concerning the security ownership of certain beneficial owners, the Company's directors and executive officers as of February 25, 2021, is set forth in the section titled "Ownership of Littelfuse, Inc. Common Stock" in the Company's proxy statement and is incorporated herein by reference.

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

Information concerning the independence of the Company's directors, certain relationships and related transactions during 2020 and the Company's policies with respect to such transactions is set forth in the sections titled "Director Independence; Financial Experts", "Related Person Transaction Policy", "Related Party Transactions" and "Dr. Zommer Consulting Agreement" in the Company's proxy statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

Information concerning principal accountant fees and services is set forth in the section titled "Audit Related Matters" in the Company's proxy statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

(a) Financial Statements and Schedules

			Page
1.	The f	following Financial Statements are filed as a part of this report:	
	i.	Reports of Independent Registered Public Accounting Firms	43 - 45
	ii.	Consolidated Balance Sheets as of December 26, 2020 and December 28, 2019	46
	iii.	Consolidated Statements of Net Income for the fiscal years ended December 26, 2020, December 28, 2019 and December 29, 2018	47
	vi.	Consolidated Statements of Comprehensive Income for the fiscal years ended December 26, 2020, December 28, 2019 and December 29, 2018	48
	v.	Consolidated Statements of Cash Flows for the fiscal years ended December 26, 2020, December 28, 2019 and December 29, 2018	49
	vi.	Consolidated Statements of Equity for the fiscal years ended December 26, 2020, December 28, 2019 and December 29, 2018	50
	vii.	Notes to Consolidated Financial Statements	51 - 88
2.	The f	Collowing Financial Statement Schedule is submitted herewith for the periods indicated therein.	
	i.	Schedule II - Valuation and Qualifying Accounts and Reserves	94

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 96

Item 16. FORM 10-K SUMMARY

None.

SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

Description	Be	lance at ginning f Year	C	narged to losts and expenses (a)	D	eductions (b)	C	Other (c)	alance at End of Year
(in thousands)									
Fiscal year ended December 26, 2020									
Allowance for losses on accounts receivable	\$	1,310	\$	1,170	\$	(329)	\$	(751)	\$ 1,400
Reserves for sales discounts and allowances	\$	40,733	\$	113,709	\$	(112,401)	\$	1,796	\$ 43,837
Fiscal year ended December 28, 2019									
Allowance for losses on accounts receivable	\$	1,062	\$	410	\$	(172)	\$	10	\$ 1,310
Reserves for sales discounts and allowances	\$	34,976	\$	133,434	\$	(127,330)	\$	(347)	\$ 40,733
Fiscal year ended December 29, 2018									
Allowance for losses on accounts receivable	\$	1,172	\$	319	\$	(557)	\$	128	\$ 1,062
Reserves for sales discounts and allowances	\$	26,344	\$	124,638	\$	(118,438)	\$	2,432	\$ 34,976

- (a) Includes provision for doubtful accounts, sales returns and sales discounts granted to customers.
- (b) Represents uncollectible accounts written off, net of recoveries and credits issued to customers.
- (c) 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/ David W. Heinzmann

David W. Heinzmann, President and Chief Executive Officer

Date: February 18, 2021

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 February 18, 2021 and in the capacities indicated.

/s/ Gordon Hunter	Chairman of the Board of Directors
Gordon Hunter	
/s/ David W. Heinzmann	Director, President and Chief Executive Officer
David W. Heinzmann	(Principal Executive Officer)
/s/ Kristina A. Cerniglia Kristina A. Cerniglia	Director
Kristilia A. Cernigila	
/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/ Maria C. Green	Director
Maria C. Green	
	Director
Nathan Zommer	
/s/ Meenal A. Sethna	Executive Vice President and Chief Financial Officer
Meenal A. Sethna	(Principal Financial Officer)
/a/ Inffance C. Combi	Company Controller and Chief Accepting Office
/s/ Jeffrey G. Gorski Jeffrey G. Gorski	Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)
Jerney G. Guiski	(1 Interpar 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:

		Incorporated by Refere			ce Herein	
Exhibit No.	5	Form	Exhibit	Filing Date	File No.	
2.1	Agreement and Plan of Merger, dated August 25, 2017, as amended by Amendment No. 1, dated December 4, 2017, by and among IXYS Corporation, Littelfuse, Inc., Iron Merger Co., Inc., and IXYS Merger Co., LLC.	S-4/A	Annex A	12/11/2017	333-22114	
3.1	Certificate of Incorporation dated November 25, 1991, as amended April 25, 1997.	10-K	3.1	2/27/2017	0-20388	
3.2	Certificate of Designations of Series A Preferred Stock.	8-K	4.2	12/1/1995	0-20388	
3.3	Bylaws, as amended and restated January 24, 2019.	8-K	3.1	1/25/2019	0-20388	
4.1	Description of Securities of Littelfuse, Inc.	10-K	4.1	2/21/2020	0-20388	
10.1	Form of Stock Option Award Agreement under the Littelfuse, Inc. Outside Directors' Equity Plan.++	8-K	99.3	5/1/2008	0-20388	
10.2	Form of Restricted Stock Unit Award Agreement under the Littelfuse, Inc. Outside Directors' Equity Plan.++	8-K	99.4	5/1/2008	0-20388	
10.3	Form of Stock Option Award Agreement under the Littelfuse, Inc. Equity Incentive Compensation Plan .++	8-K	10.2	4/28/2009	0-20388	
10.4	Form of Restricted Stock Unit Award Agreement (Outside Director) under the Littelfuse, Inc. Long-Term Incentive Plan.+	S-8	4.4	5/19/2010	0-20388	
10.5	Form of Stock Option Award Agreement under the Littelfuse, Inc. Long-Term Incentive Plan.++	S-8	4.6	5/19/2010	0-20388	
10.6	Littelfuse, Inc. Annual Incentive Plan, effective January 1, 2014. ++	DEF14A	A	3/17/2014	0-20388	
10.7	Form of Restricted Stock Unit Award Agreement (Executive) under the Littelfuse, Inc. Long-Term Incentive Plan.++	10-Q	10.2	7/31/2015	0-20388	
10.8	Form of Restricted Stock Unit Award Agreement (Tier II Management) under the Littelfuse, Inc. Long-Term Incentive Plan.++	10-Q	10.3	7/31/2015	0-20388	
10.9	Form of Stock Option Award Agreement (Executive) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.3	5/6/2016	0-20388	
10.10	Form of Stock Option Award Agreement (Outside Director – 2016 Grant) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.4	5/6/2016	0-20388	
10.11	Form of Restricted Stock Unit Award Agreement (Executive) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.5	5/6/2016	0-20388	
10.12	Form of Restricted Stock Unit Award Agreement (Tier II Management) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.6	5/6/2016	0-20388	
10.13	Form of Restricted Stock Unit Award Agreement (Outside Director – 2016 Grant) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.7	5/6/2016	0-20388	
10.14	Letter Agreement entered into between Littelfuse, Inc. and David W. Heinzmann. Effective January 1, 2017. ++	8-K	10.2	11/16/2016	0-20388	
10.15	Littelfuse, Inc. 3.03% Senior Note, Series A, due February 15, 2022, and 3.74% Senior Note, Series B, due February 15, 2027 Note Purchase Agreement.	8-K	10.1	12/9/2016	0-20388	
10.16	Littelfuse, Netherland C.V. 1.14% Senior Note, Series A, due December 8, 2023, and 1.83% Senior Note, Series B, due December 8, 2028 Note Purchase Agreement.	8-K	10.2	12/9/2016	0-20388	

		Inco	rporated	by Reference	Herein
Exhibit No.	Description	Form	Exhibit	Filing Date	File No.
10.17	Subsidiary Guaranty Agreement, dated December 8, 2016.	8-K	10.4	12/9/2016	0-20388
10.18	Subsidiary Guaranty Agreement, dated as of February 15, 2017.	8-K	10.2	2/15/2017	0-20388
10.19	Restated Littelfuse, Inc. Supplemental Retirement and Savings Plan, effective January 1, 2017. ++	10-K	10.50	2/27/2017	0-20388
10.20	Amended and Restated Littelfuse, Inc. Long-Term Incentive Plan. ++	8-K	10.1	5/1/2017	0-20388
10.21	Form of 2017 Restricted Stock Unit Award Agreement. ++	8-K	10.2	5/1/2017	0-20388
10.22	Form of 2017 Stock Option Award Agreement. ++	8-K	10.3	5/1/2017	0-20388
10.23	Employment offer letter between Littelfuse, Inc. and Jeffrey Gorski, dated June 28, 2017. ++	8-K	10.1	8/14/2017	0-20388
10.24	U.S. Subsidiary Guarantor Supplement, dated as of October 13, 2017, made by Iron Merger Co., Inc. in favor of the note purchasers and the other holders.	8-K	10.5	10/16/2017	0-20388
10.25	U.S. Subsidiary Guarantor Supplement, dated as of October 13, 2017, made by IXYS Merger Co., LLC in favor of the note purchasers and the other holders.	8-K	10.6	10/16/2017	0-20388
10.26	Cross Border Subsidiary Guarantor Supplement, dated as of October 13, 2017, made by Iron Merger Co., Inc. in favor of the note purchasers and the other holders.	8-K	10.7	10/16/2017	0-20388
10.27	Cross Border Subsidiary Guarantor Supplement, dated as of October 13, 2017, made by IXYS Merger Co., LLC in favor of the note purchasers and the other holders.	8-K	10.8	10/16/2017	0-20388
10.28	Note Purchase Agreement, dated November 15, 2017, among Littelfuse, Inc. and note purchasers listed on the signature pages thereto.	8-K	10.1	11/15/2017	0-20388
10.29	Form of 3.78% Senior Note, Series B, due February 15, 2030.	8-K	4.2	11/15/2017	0-20388
10.30	Form of 3.48% Senior Note, Series A, due February 15, 2025,	8-K	4.1	11/15/2017	0-20388
10.31	Subsidiary Guaranty Agreement, dated as of January 16, 2018, made by LFUS LLC, Littelfuse Commercial Vehicle, LLC, Iron Merger Co., Inc., IXYS Merger Co., LLC and SymCom, Inc. in favor of the note purchasers and the other holders.	8-K	10.2	1/18/2018	0-20388
10.32	Littelfuse, Inc. Executive Severance Policy. ++	8-K	10.4	1/18/2018	0-20388
10.33	Form of Indemnity Agreement between Nathan Zommer and IXYS Corporation. ++	10-K	10.3	6/12/2008	000-26124
10.34	IXYS Corporation 2009 Equity Incentive Plan++	S-8	4.4	1/19/2018	333-221147
10.35	IXYS Corporation 2011 Equity Incentive Plan++	S-8	4.5	1/19/2018	333-221147
10.36	IXYS Corporation 2013 Equity Incentive Plan++	S-8	4.6	1/19/2018	333-221147
10.37	IXYS Corporation 2016 Equity Incentive Plan++	S-8	4.7	1/19/2018	333-221147
10.38	Zilog, Inc. 2002 Omnibus Stock Incentive Plan++	S-8	4.8	1/19/2018	333-221147
10.39	Zilog, Inc. 2004 Omnibus Stock Incentive Plan++	S-8	4.9	1/19/2018	333-221147
10.40	Notice of Stock Option Grant and Agreement for the IXYS Corporation 2009 Equity Incentive Plan++	10-Q	10.4	8/10/2009	000-26124
10.41	Form of Nonqualified Stock Option Agreement for Stock Options pursuant to the Zilog, Inc. 2004 Omnibus Stock Incentive Plan++	10-K	10.28	6/11/2010	000-26124
10.42	Notice of Stock Option Grant and Agreement for IXYS Corporation 2011 Equity Incentive Plan++	10-Q	10.2	8/5/2011	000-26124
10.43	Notice of Stock Option Grant and Agreement for IXYS Corporation 2013 Equity Incentive Plan++	10-Q	10.6	8/9/2013	000-26124
10.44	Notice of Stock Option Grant and Agreement for IXYS Corporation 2016 Equity Incentive Plan++	10-Q	10.1	11/3/2016	000-26124

		Inco	rporated	by Reference	Herein
Exhibit No.	Description	Form	Exhibit	Filing Date	File No.
10.45	U.S. Subsidiary Guarantor Supplement, dated as of March 14, 2018, made by Clare Capital, Inc., Clare Components, Inc., Clare Electronics, Inc., Clare Instruments, Inc., Clare Services, Inc., Clare Technologies, Inc., Directed Energy, Inc., IXYS Buckeye, LLC, IXYS Integrated Circuits Division AV Inc., IXYS Integrated Circuits Divisions Inc., IXYS Long Beach, Inc., IXYS USA, Inc., Microwave Technology, Inc., Pele Technology, Inc., Reaction Technology Incorporation and Zilog, Inc. in favor of the note purchasers and the other holders.	10-Q	10.2	05/02/2018	0-20388
10.46	Cross Border Subsidiary Guarantor Supplement, dated as of March 14, 2018, made by Clare Capital, Inc., Clare Components, Inc., Clare Electronics, Inc., Clare Instruments, Inc., Clare Services, Inc., Clare Technologies, Inc., Directed Energy, Inc., IXYS Buckeye, LLC, IXYS Integrated Circuits Division AV Inc., IXYS Integrated Circuits Divisions Inc., IXYS Long Beach, Inc., IXYS USA, Inc., Microwave Technology, Inc., Pele Technology, Inc., Reaction Technology Incorporation and Zilog, Inc. in favor of the note purchasers and the other holders.	10-Q	10.3	05/02/2018	0-20388
10.47	Note Purchase Agreement Subsidiary Guarantor Supplement, dated as of March 14, 2018, made by Clare Capital, Inc., Clare Components, Inc., Clare Electronics, Inc., Clare Instruments, Inc., Clare Services, Inc., Clare Technologies, Inc., Directed Energy, Inc., IXYS Buckeye, LLC, IXYS Integrated Circuits Division AV Inc., IXYS Integrated Circuits Divisions Inc., IXYS Long Beach, Inc., IXYS USA, Inc., Microwave Technology, Inc., Pele Technology, Inc., Reaction Technology Incorporation and Zilog, Inc. in favor of the note purchasers and the other holders.	10-Q	10.4	05/02/2018	0-20388
10.48	U.S. Subsidiary Guarantor Supplement, dated as of August 22, 2018, made by Reaction Technology Epi, LLC and Reaction Tech RE, LLC in favor of the note purchasers and the other holders.	10-Q	10.3	10/31/2018	0-20388
10.49	Cross Border Subsidiary Guarantor Supplement, dated as of August 22, 2018, made by Reaction Technology Epi, LLC and Reaction Tech RE, LLC in favor of the note purchasers and the other holders.	10-Q	10.4	10/31/2018	0-20388
10.50	Note Purchase Agreement Subsidiary Guarantor Supplement, dated as of August 22, 2018, made by Reaction Technology Epi, LLC and Reaction Tech RE, LLC in favor of the note purchasers and the other holders.	10-Q	10.5	10/31/2018	0-20388
10.51	U.S. Subsidiary Guarantor Supplement, dated as of October 22, 2018, made by Littelfuse International Holding, LLC, Littelfuse Holding, LLC and Monolith Semiconductor, Inc. in favor of the note purchasers and the other holders.	10-K	10.104	02/22/2019	0-20388
10.52	U.S. (November 2017) Subsidiary Guarantor Supplement, dated as of October 22, 2018, made by Littelfuse International Holding, LLC, Littelfuse Holding, LLC and Monolith Semiconductor, Inc. in favor of the note purchasers and the other holders.	10-K	10.105	02/22/2019	0-20388
10.53	Cross Border Assumption Agreement, dated as of October 3, 2018, made by each of New Dutch B.V. and IXYS Dutch B.V. in favor of the note purchasers and the other holders.	10-K	10.106	02/22/2019	0-20388
10.54	Cross Border Subsidiary Guarantor Supplement, dated as of October 22, 2018, made by Littelfuse International Holding, LLC, Littelfuse Holding, LLC and Monolith Semiconductor, Inc. in favor of the note purchasers and the other holders.	10-K	10.107	02/22/2019	0-20388
10.55	Amended and Restated Employment Agreement entered into between Littelfuse Europe GmbH and Alexander Conrad, effective April 1, 2019. ++	10-K	10.77	02/21/2020	0-20388

		Inco	rporated	by Reference	Herein
Exhibit No.	Description	Form	Exhibit	Filing Date	File No.
10.56	Amended and Restated Credit Agreement, dated as of April 3, 2020, by and among Littelfuse, Inc., certain subsidiaries of the company, as designated borrowers, certain subsidiaries of the company, as guarantors, the lenders party thereto and Bank of America, N.A., as agent, JPMorgan Chase Bank, N.A., as syndication agent, PNC Bank, National Association, as senior documentation agent, BMO Harris Bank, N.A. and Wells Fargo Bank, National Association, as co-documentation agents, BofA Securities, Inc. as sole bookrunner and joint lead arranger, and JPMorgan Chase Bank, N.A., as joint lead arranger.	8-K	10.1	4/7/2020	0-20388
10.57	Form of Restricted Stock Unit Award Agreement (Tier I) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	8-K	10.1	4/24/2020	0-20388
10.58	Form of Option Award Agreement (Tier I) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	8-K	10.2	4/24/2020	0-20388
10.59	Form of Restricted Stock Unit Award Agreement (Non- Employee Director) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	8-K	10.3	4/24/2020	0-20388
10.60	Form of Option Award Agreement (Non-Employee Director) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	8-K	10.4	4/24/2020	0-20388
10.61	Form of Restricted Stock Unit Award Agreement (Tier II) under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.6	4/29/2020	0-20388
10.62	Form of Restricted Stock Unit Award Agreement (IXYS Tier II) under the IXYS Corporation Equity Incentive Plan. ++	10-Q	10.7	4/29/2020	0-20388
10.63	Form of Retention Stock Option Award Agreement under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.8	7/29/2020	0-20388
10.64	Form of Retention Stock Option Award Agreement under the IXYS Corporation Equity Incentive Plan. ++	10-Q	10.9	7/29/2020	0-20388
10.65	Form of Retention Restricted Stock Unit Award Agreement under the Littelfuse, Inc. Long-Term Incentive Plan. ++	10-Q	10.10	7/29/2020	0-20388
10.66	Form of Retention Restricted Stock Unit Award Agreement under the IXYS Corporation Equity Incentive Plan. ++	10-Q	10.11	7/29/2020	0-20388
10.67	Amended and Restated Littelfuse Deferred Compensation Plan for Non-Employee Directors. ++	10-Q	10.1	10/28/2020	0-20388
10.68*	First Amendment to the Littelfuse, Inc. Supplemental Retirement and Savings Plan, effective January 1, 2019.++				
10.69*	Second Amendment to the Littelfuse, Inc. Supplemental Retirement and Savings Plan, effective January 1, 2020.++				
10.70*	Third Amendment to the Littelfuse, Inc. Supplemental Retirement and Savings Plan, effective January 1, 2020.++				
10.71*	Form Tier I Change of Control Agreement, effective January 1, 2021.++				
10.72*	Form Tier II Change of Control Agreement, effective January 1, 2021.++				
10.73*	Summary of Non-Employee Director Compensation.++				
21.1*	Subsidiaries.				
23.1*	Consent of Independent Registered Public Accounting Firm.				
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1+++	Certification of the Chief Executive Officer and Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				

		Inco	rporated	by Reference	Herein
Exhibit No.	Description	Form	Exhibit	Filing Date	File No.
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.				
104	The cover page on this Annual Report on Form 10-K for the fiscal year ended December 26, 2020, formatted in Inline XBRL and contained in Exhibit 101.				

^{*} 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.

EXECUTIVE OFFICERS

DAVID W. HEINZMANN

President and Chief Executive Officer

MEENAL A. SETHNA

Executive Vice President and Chief Financial Officer

RYAN K. STAFFORD

Executive Vice President, Chief Legal and Human Resources Officer and Corporate Secretary

MATTHEW J. COLE

Senior Vice President, eMobility and Corporate Strategy

ALEXANDER CONRAD

Senior Vice President and General Manager, Passenger Vehicle Business

DEEPAK NAYAR

Senior Vice President and General Manager, Electronics Business

BOARD OF DIRECTORS

KRISTINA A. CERNIGLIA

Senior Vice President and Chief Financial Officer Hillenbrand, Inc.

TZAU-JIN CHUNG

Senior Partner Core Industrial Partners, LLC

CARY T. FU

Co-Founder and Retired Chairman Benchmark Electronics, Inc.

MARIA C. GREEN

Retired Senior Vice President and General Counsel Ingersoll-Rand plc

ANTHONY GRILLO

Founder Ascribe Opportunities Management, LLC

DAVID W. HEINZMANN

President and Chief Executive Officer Littelfuse, Inc.

GORDON HUNTER

Chairman of the Board Retired President and Chief Executive Officer Littelfuse, Inc.

JOHN E. MAJOR

President MTSG

WILLIAM P. NOGLOWS

Chairman of the Board CMC Materials, Inc.

DR. NATHAN ZOMMER

Founder, former Chairman and Chief Executive Officer IXYS Corporation

CORPORATE INFORMATION

ANNUAL MEETING

The Annual Meeting of Littelfuse, Inc. will be held at 9:00 a.m. Central Daylight Time on April 22, 2021. Due to the ongoing public heath impact of the COVID-19 outbreak, and to support the health and well-being of our stockholders, this year's Annual Meeting will be a virtual meeting held via live webcast on the Internet. Stockholders will be able to attend the Annual Meeting and submit questions during the live webcast by visiting www.virtualshareholdermeeting.com/LFUS2021 and entering the 16-digit control number included in the Notice of Internet Availability of Proxy Materials, on the proxy card or in the instructions that accompanied the proxy materials. Proxy materials and a copy of this report will be mailed or made available via the Internet in advance of the meeting to all stockholders of record as of February 25, 2021.

COMMON STOCK

Littelfuse, Inc. common stock is traded on the NASDAQ® Global Select Market under the symbol LFUS.

STOCKHOLDER INFORMATION

In addition to annual reports to stockholders, copies of the Company's filings with the Securities and Exchange Commission are available on the Investor Relations section of our website at: investor.littelfuse.com.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Grant Thornton LLP 27777 Franklin Road Suite 800 Southfield, MI 48034

TRANSFER AGENT

EQ Shareowner Services 1110 Centre Pointe Curve Suite 101 Mendota Heights, MN 55110 1.800.468.9716

LITTELFUSE WORLD HEADQUARTERS

Littelfuse, Inc. 8755 West Higgins Road Suite 500 Chicago, IL 60631 +1.773.628.1000

Littelfuse.com

