United States
Securities and Exchange Commission
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 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 incorporation or organization)	**(I.R.S. Employer Identification No.)**

8755 West Higgins Road
Suite 500

Chicago	**Illinois**	**60631**
(Address of principal executive offices)		**(ZIP Code)**

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

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

Title of Each Class	Trading Symbol	Name of exchange on which registered
Common Stock, $0.01 par value	LFUS	NASDAQ Global Select Market

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 [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (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 [X] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act (Check one): 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. Yes [ ] No [ ]

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

As of October 23, 2020, the registrant had outstanding 24,375,049 shares of Common Stock, net of Treasury Shares.

TABLE OF CONTENTS

LITTELFUSE, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands)	(Unaudited) September 26, 2020	December 28, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 641,890	$ 531,139
Short-term investments	52	44
Trade receivables, less allowances of $42,737 and $42,043 at September 26, 2020 and December 28, 2019, respectively	231,930	202,309
Inventories	243,832	237,507
Prepaid income taxes and income taxes receivable	1,218	4,831
Prepaid expenses and other current assets	30,012	28,564
Total current assets	1,148,934	1,004,394
Net property, plant, and equipment	339,870	344,617
Intangible assets, net of amortization	296,159	321,247
Goodwill	799,791	820,589
Investments	26,066	24,099
Deferred income taxes	7,173	8,069
Right of use lease assets, net	18,811	21,918
Other assets	17,566	14,965
Total assets	$ 2,654,370	$ 2,559,898
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 120,938	$ 117,320
Accrued liabilities	98,437	84,120
Accrued income taxes	15,231	14,122
Current portion of long-term debt	—	10,000
Total current liabilities	234,606	225,562
Long-term debt, less current portion	725,507	669,158
Deferred income taxes	46,584	49,763
Accrued post-retirement benefits	40,279	38,198
Non-current operating lease liabilities	14,193	17,166
Other long-term liabilities	63,639	64,037
Shareholders' equity:		
Common stock, par value $0.01 per share: 34,000,000 shares authorized; shares issued, September 26, 2020–26,015,067; December 28, 2019–25,855,203	258	256
Treasury stock, at cost: 1,644,103 and 1,473,901 shares, respectively	(242,323)	(216,447)
Additional paid-in capital	891,924	867,996
Accumulated other comprehensive loss	(107,238)	(106,823)
Retained earnings	986,810	950,901
Littelfuse, Inc. shareholders' equity	1,529,431	1,495,883
Non-controlling interest	131	131
Total equity	1,529,562	1,496,014
Total liabilities and equity	$ 2,654,370	$ 2,559,898

See accompanying Notes to Condensed Consolidated Financial Statements.

LITTELFUSE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF NET INCOME
(Unaudited)

	Three Months Ended		Nine Months Ended	
(in thousands, except per share data)	**September 26, 2020**	**September 28, 2019**	**September 26, 2020**	**September 28, 2019**
Net sales	$ 391,566	$ 361,971	$ 1,044,999	$ 1,165,350
Cost of sales	253,390	231,025	684,012	737,368
Gross profit	138,176	130,946	360,987	427,982
Selling, general, and administrative expenses	50,465	54,224	158,832	174,845
Goodwill impairment charge	—	—	33,841	—
Research and development expenses	13,049	19,728	41,044	62,595
Amortization of intangibles	10,104	9,827	29,912	30,068
Total operating expenses	73,618	83,779	263,629	267,508
Operating income	64,558	47,167	97,358	160,474
Interest expense	4,988	5,559	16,261	16,834
Foreign exchange (gain) loss	(6,174)	4,968	(9,600)	5,636
Other income, net	(1,682)	(4,764)	(1,643)	(3,406)
Income before income taxes	67,426	41,404	92,340	141,410
Income taxes	12,070	5,757	21,331	24,982
Net income	$ 55,356	$ 35,647	$ 71,009	$ 116,428
Income per share:				
Basic	$ 2.27	$ 1.46	$ 2.92	$ 4.72
Diluted	$ 2.25	$ 1.44	$ 2.89	$ 4.68
Weighted-average shares and equivalent shares outstanding:				
Basic	24,357	24,482	24,354	24,646
Diluted	24,573	24,684	24,535	24,894

See accompanying Notes to Condensed Consolidated Financial Statements.

LITTELFUSE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)

	Three Months Ended		Nine Months Ended	
(in thousands)	**September 26, 2020**	**September 28, 2019**	**September 26, 2020**	**September 28, 2019**
Net income	$ 55,356	$ 35,647	$ 71,009	$ 116,428
Other comprehensive income (loss):				
Pension and postemployment adjustment, net of tax	563	137	(9,715)	249
Foreign currency translation adjustments	16,418	(17,163)	9,300	(14,933)
Comprehensive income	$ 72,337	$ 18,621	$ 70,594	$ 101,744

See accompanying Notes to Condensed Consolidated Financial Statements.

LITTELFUSE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended	
(in thousands)	**September 26, 2020**	**September 28, 2019**
OPERATING ACTIVITIES		
Net income	$ 71,009	$ 116,428
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	41,953	38,988
Amortization of intangibles	29,912	30,068
Deferred revenue	(438)	(228)
Impairment charges	36,078	322
Stock-based compensation	14,544	15,738
(Gain) loss on investments and other assets	(1,200)	559
Deferred income taxes	1,567	(203)
Other	(8,549)	8,267
Changes in operating assets and liabilities:		
Trade receivables	(29,362)	2,781
Inventories	(1,611)	18,102
Accounts payable	6,661	(29,453)
Accrued liabilities and income taxes	(2,095)	(44,241)
Prepaid expenses and other assets	5,787	3,735
Net cash provided by operating activities	164,256	160,863
INVESTING ACTIVITIES		
Acquisitions of businesses, net of cash acquired	—	(775)
Purchases of property, plant, and equipment	(41,536)	(38,397)
Net proceeds from sale of property, plant and equipment	148	6,212
Net cash used in investing activities	(41,388)	(32,960)
FINANCING ACTIVITIES		
Proceeds of revolving credit facility	240,000	—
Payments of revolving credit facility	(60,000)	—
Payments of term loan	(145,000)	(7,500)
Net proceeds related to stock-based award activities	6,437	4,412
Purchases of common stock	(22,927)	(99,387)
Debt issuance costs	(1,786)	—
Cash dividends paid	(35,100)	(32,990)
Net cash used in financing activities	(18,376)	(135,465)
Effect of exchange rate changes on cash and cash equivalents	6,259	(6,114)
Increase (decrease) in cash and cash equivalents	110,751	(13,676)
Cash and cash equivalents at beginning of period	531,139	489,733
Cash and cash equivalents at end of period	$ 641,890	$ 476,057
Supplementary Cash Flow Information		
Cash paid during the period for interest	$ 17,228	$ 17,872
Capital expenditures, not yet paid	$ 6,267	$ 8,978

See accompanying Notes to Condensed Consolidated Financial Statements.

LITTELFUSE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Littelfuse, Inc. Shareholders' Equity						
(in thousands, except share and per share data)	**Common Stock**	**Addl. Paid in Capital**	**Treasury Stock**	**Accum. Other Comp. (Loss) Income**	**Retained Earnings**	**Non-controlling Interest**	**Total**
Balance at December 28, 2019	$ 256	$ 867,996	$ (216,447)	$ (106,823)	$ 950,901	$ 131	$ 1,496,014
Net income	—	—	—	—	24,644	—	24,644
Other comprehensive loss, net of tax	—	—	—	(14,979)	—	—	(14,979)
Stock-based compensation	—	2,965	—	—	—	—	2,965
Withheld shares on restricted share units for withholding taxes	—	—	(443)	—	—	—	(443)
Stock options exercised	—	3,399	—	—	—	—	3,399
Repurchases of common stock	—	—	(22,927)	—	—	—	(22,927)
Cash dividends paid ($0.48 per share)	—	—	—	—	(11,725)	—	(11,725)
Balance at March 28, 2020	$ 256	$ 874,360	$ (239,817)	$ (121,802)	$ 963,820	$ 131	$ 1,476,948
Net loss	—	—	—	—	(8,991)	—	(8,991)
Other comprehensive loss, net of tax	—	—	—	(2,417)	—	—	(2,417)
Stock-based compensation	—	7,887	—	—	—	—	7,887
Withheld shares on restricted share units for withholding taxes	—	—	(2,375)	—	—	—	(2,375)
Stock options exercised	1	3,059	—	—	—	—	3,060
Cash dividends paid ($0.48 per share)	—	—	—	—	(11,678)	—	(11,678)
Balance at June 27, 2020	$ 257	$ 885,306	$ (242,192)	$ (124,219)	$ 943,151	$ 131	$ 1,462,434
Net income	—	—	—	—	55,356	—	55,356
Other comprehensive income, net of tax	—	—	—	16,981	—	—	16,981
Stock-based compensation	—	3,692	—	—	—	—	3,692
Withheld shares on restricted share units for withholding taxes	—	—	(131)	—	—	—	(131)
Stock options exercised	1	2,926	—	—	—	—	2,927
Cash dividends paid ($0.48 per share)	—	—	—	—	(11,697)	—	(11,697)
Balance at September 26, 2020	$ 258	$ 891,924	$ (242,323)	$ (107,238)	$ 986,810	$ 131	$ 1,529,562

See accompanying Notes to Condensed Consolidated Financial Statements.

	Littelfuse, Inc. Shareholders' Equity						
(in thousands, except share and per share data)	Common Stock	Addl. Paid in Capital	Treasury Stock	Accum. Other Comp. (Loss) Income	Retained Earnings	Non-controlling Interest	Total
Balance at December 29, 2018	$ 254	$ 835,828	$ (116,454)	$ (97,924)	$ 856,507	$ 131	$ 1,478,342
Net income	—	—	—	—	36,989	—	36,989
Other comprehensive loss, net of tax	—	—	—	8,073	—	—	8,073
Stock-based compensation	—	3,966	—	—	—	—	3,966
Withheld shares on restricted share units for withholding taxes	—	—	(94)	—	—	—	(94)
Stock options exercised	—	2,292	—	—	—	—	2,292
Repurchases of common stock	—	—	(13,555)	—	—	—	(13,555)
Cash dividends paid ($0.43 per share)	—	—	—	—	(10,625)	—	(10,625)
Balance at March 30, 2019	$ 254	$ 842,086	$ (130,103)	$ (89,851)	$ 882,871	$ 131	$ 1,505,388
Net income	—	—	—	—	43,792	—	43,792
Other comprehensive loss, net of tax	—	—	—	(5,731)	—	—	(5,731)
Stock-based compensation	—	8,284	—	—	—	—	8,284
Withheld shares on restricted share units for withholding taxes	—	—	(4,010)	—	—	—	(4,010)
Stock options exercised	1	4,822	—	—	—	—	4,823
Repurchases of common stock	—	—	(31,955)	—	—	—	(31,955)
Cash dividends paid ($0.43 per share)	—	—	—	—	(10,649)	—	(10,649)
Balance at June 29, 2019	$ 255	$ 855,192	$ (166,068)	$ (95,582)	$ 916,014	$ 131	$ 1,509,942
Net income	—	—	—	—	35,647	—	35,647
Other comprehensive loss, net of tax	—	—	—	(17,026)	—	—	(17,026)
Stock-based compensation	—	3,488	—	—	—	—	3,488
Withheld shares on restricted share units for withholding taxes	—	—	(790)	—	—	—	(790)
Stock options exercised	1	2,191	—	—	—	—	2,192
Repurchases of common stock	—	—	(49,526)	—	—	—	(49,526)
Cash dividends paid ($0.48 per share)	—	—	—	—	(11,715)	—	(11,715)
Balance at September 28, 2019	$ 256	$ 860,871	$ (216,384)	$ (112,608)	$ 939,946	$ 131	$ 1,472,212

See accompanying Notes to Condensed Consolidated Financial Statements.

Notes to Condensed Consolidated Financial Statements

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. Serving over 100,000 end customers, 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.

Basis of Presentation

The Company's accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with U.S. Generally Accepted Accounting Principles ("GAAP") for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, certain information and disclosures normally included in the consolidated balance sheets, statements of net income and comprehensive income, statements of cash flows, and statement of stockholders' equity prepared in conformity with U.S. GAAP have been condensed or omitted as permitted by such rules and regulations, although the Company believes that the disclosures made are adequate to make the information not misleading. They have been prepared in accordance with accounting policies described in the Company's Annual Report on Form 10-K for the fiscal year ended December 28, 2019 which should be read in conjunction with the disclosures therein. In the opinion of management, all adjustments considered necessary for a fair presentation have been included and are of a normal, recurring nature. Operating results for interim periods are not necessarily indicative of annual operating results.

Revenue Recognition

Revenue Disaggregation

The following tables disaggregate the Company's revenue by primary business units for the three and nine months ended September 26, 2020 and September 28, 2019:

	Three Months Ended September 26, 2020				Nine Months Ended September 26, 2020			
(in thousands)	**Electronics Segment**	**Automotive Segment**	**Industrial Segment**	**Total**	**Electronics Segment**	**Automotive Segment**	**Industrial Segment**	**Total**
Electronics – Passive Products and Sensors	$ 108,253	$ —	$ —	$ 108,253	$ 285,697	$ —	$ —	$ 285,697
Electronics – Semiconductor	147,096	—	—	147,096	407,112	—	—	407,112
Passenger Car Products	—	52,691	—	52,691	—	135,645	—	135,645
Automotive Sensors	—	26,093	—	26,093	—	64,166	—	64,166
Commercial Vehicle Products	—	25,940	—	25,940	—	71,682	—	71,682
Industrial Products	—	—	31,493	31,493	—	—	80,697	80,697
Total	$ 255,349	$ 104,724	$ 31,493	$ 391,566	$ 692,809	$ 271,493	$ 80,697	$ 1,044,999

(in thousands)	Three Months Ended September 28, 2019 Electronics Segment	Automotive Segment	Industrial Segment	Total	Nine Months Ended September 28, 2019 Electronics Segment	Automotive Segment	Industrial Segment	Total
Electronics – Passive Products and Sensors	$ 94,766	$ —	$ —	$ 94,766	$ 311,624	$ —	$ —	$ 311,624
Electronics – Semiconductor	132,486	—	—	132,486	440,575	—	—	440,575
Passenger Car Products	—	53,889	—	53,889	—	164,348	—	164,348
Automotive Sensors	—	23,877	—	23,877	—	74,616	—	74,616
Commercial Vehicle Products	—	26,915	—	26,915	—	87,850	—	87,850
Industrial Products	—	—	30,038	30,038	—	—	86,337	86,337
Total	$ 227,252	$ 104,681	$ 30,038	$ 361,971	$ 752,199	$ 326,814	$ 86,337	$ 1,165,350

See Note 14, *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 distribution channels are primarily through direct sales and independent third-party distributors.

The Company 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 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 Littelfuse management, can return previously purchased goods for full or partial credit. The Company establishes an estimated allowance for these returns based on historic activity. Sales revenue and cost of sales are reduced to anticipate estimated returns.

Volume Rebates

The Company offers 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.

Recently Adopted Accounting Standards

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 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 Condensed 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 Condensed 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 Condensed Consolidated Financial Statements.

In March 2020, the FASB issued ASU 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 Company does not expect a material effect from the adoption of this guidance on its Condensed Consolidated Financial Statements.

2. Inventories

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

(in thousands)	September 26, 2020	December 28, 2019
Raw materials	$ 81,849	$ 76,732
Work in process	90,494	84,561
Finished goods	105,425	110,388
Inventory Reserves	(33,936)	(34,174)
Total	$ 243,832	$ 237,507

3. Property, Plant, and Equipment

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

(in thousands)	September 26, 2020	December 28, 2019
Land	$ 23,438	$ 24,758
Building	122,914	108,501
Equipment	656,681	631,273
Accumulated depreciation and amortization	(463,163)	(419,915)
Total	$ 339,870	$ 344,617

The Company recorded depreciation expense of $14.2 million and $13.3 million for the three months ended September 26, 2020 and September 28, 2019, respectively, and $42.0 million and $39.0 million for nine months ended September 26, 2020 and September 28, 2019, respectively.

4. Goodwill and Other Intangible Assets

The amounts for goodwill and changes in the carrying value by segment for the nine months ended September 26, 2020 are as follows:

(in thousands)	Electronics	Automotive	Industrial	Total
As of December 28, 2019	$ 650,796	$ 131,321	$ 38,472	$ 820,589
Impairments	—	(33,841)	—	(33,841)
Currency translation	11,122	1,988	(67)	13,043
As of September 26, 2020	$ 661,918	$ 99,468	$ 38,405	$ 799,791

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 September 26, 2020, the automotive sensors reporting unit had $9.4 million of remaining goodwill.

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

	As of September 26, 2020		
(in thousands)	**Gross Carrying Value**	**Accumulated Amortization**	**Net Book Value**
Land use rights	$ 9,913	$ 1,895	$ 8,018
Patents, licenses and software	133,737	$ 88,142	$ 45,595
Distribution network	43,547	38,107	5,440
Customer relationships, trademarks, and tradenames	365,300	128,194	237,106
Total	$ 552,497	$ 256,338	$ 296,159

	As of December 28, 2019		
(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 three months ended September 26, 2020 and September 28, 2019, the Company recorded amortization expense of $10.1 million and $9.8 million, respectively. During the nine months ended September 26, 2020 and September 28, 2019, the Company recorded amortization expense of $29.9 million and $30.1 million, respectively.

The Company recognized a $0.3 million non-cash impairment charge in the first quarter of 2020 on a certain patent triggered by the Company's announcement to consolidate a manufacturing facility within the Industrial segment.

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

(in thousands)	**Amount**
2020	$ 41,742
2021	38,258
2022	37,274
2023	32,492
2024	29,695
2025 and thereafter	146,610
Total	$ 326,071

5. Accrued Liabilities

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

(in thousands)	September 26, 2020	December 28, 2019
Employee-related liabilities	$ 49,805	$ 40,774
Operating lease liability	6,866	7,259
Interest	2,747	5,058
Professional services	2,869	3,986
Restructuring liability	4,542	2,679
Other non-income taxes	3,509	1,940
Other	28,099	22,424
Total	$ 98,437	$ 84,120

Employee-related liabilities consist primarily of payroll, sales commissions, 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.

6. Restructuring, Impairment and Other Charges

The Company recorded restructuring, impairment and other charges for the three and nine months ended September 26, 2020 and September 28, 2019 as follows:

	Three months ended September 26, 2020				Nine months ended September 26, 2020			
(in thousands)	Electronics	Automotive	Industrial	Total	Electronics	Automotive	Industrial	Total
Employee terminations	$ 388	$ 162	$ 648	$ 1,198	$ 2,125	$ 770	$ 1,719	$ 4,614
Other restructuring charges	—	—	79	79	—	108	104	212
Total restructuring charges	388	162	727	1,277	2,125	878	1,823	4,826
Impairment	—	—	—	—	—	33,841	2,237	36,078
Total	$ 388	$ 162	$ 727	$ 1,277	$ 2,125	$ 34,719	$ 4,060	$ 40,904

	Three months ended September 28, 2019				Nine months ended September 28, 2019			
(in thousands)	Electronics	Automotive	Industrial	Total	Electronics	Automotive	Industrial	Total
Employee terminations	$ 655	$ 109	$ 49	$ 813	$ 4,153	$ 3,955	$ 770	$ 8,878
Other restructuring charges	128	1,150	124	1,402	141	1,240	374	1,755
Total restructuring charges	783	1,259	173	2,215	4,294	5,195	1,144	10,633
Impairment	—	322	—	322	—	322	—	322
Total	$ 783	$ 1,581	$ 173	$ 2,537	$ 4,294	$ 5,517	$ 1,144	$ 10,955

2020
For the three and nine months ended September 26, 2020, the Company recorded total restructuring charges of $1.3 million and $4.8 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 for the nine months ended September 26, 2020, 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. The impairment charges of the land and building were included in selling, general and administrative expenses. See Note 4, *Goodwill and Other Intangible Assets* for further discussion regarding the goodwill impairment charge.

2019
For the three and nine months ended September 28, 2019, the Company recorded total restructuring charges of $2.2 million, and $10.6 million, respectively, for employee termination costs and other restructuring charges. These charges primarily related to reorganization of operations and selling, general and administrative functions as well as integration of IXYS within the Electronics segment and the reorganization of operations in the commercial vehicle products and automotive sensors businesses within the Automotive segment.

The restructuring liability as of September 26, 2020 and December 28, 2019 are $4.5 million and $2.7 million, respectively. The restructuring liability is included within accrued liabilities in the Condensed Consolidated Balance Sheets. The Company anticipates the remaining payments associated with employee terminations will primarily be completed by September 2021.

7. Debt

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

(in thousands)	**September 26, 2020**	**December 28, 2019**
Revolving Credit Facility	$ 180,000	$ —
Term Loan	—	145,000
Euro Senior Notes, Series A due 2023	136,417	129,808
Euro Senior Notes, Series B due 2028	110,766	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	(4,295)	(3,669)
Total debt	725,507	679,158
Less: Current maturities	—	(10,000)
Total long-term debt	$ 725,507	$ 669,158

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 included 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 could 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 coronavirus disease 2019 ("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 $60.0 million on the amended revolving credit facility during the three months ended September 26, 2020. The balance under the facility was $180.0 million as of September 26, 2020.

Outstanding borrowings under the amended Credit Agreement bears 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 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 amended Credit Agreement included 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 1.90% at September 26, 2020.

As of September 26, 2020, the Company had no amount outstanding in letters of credit and had available $245.1 million of borrowing capacity under the Revolving Credit Facility based on financial covenants. At September 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 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 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 September 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.

Interest paid on all Company debt was $6.4 million for the three months ended September 26, 2020 and September 28, 2019, and $17.2 million and $17.9 million for the nine months ended September 26, 2020 and September 28, 2019, respectively.

8. 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 and recorded in investments and other assets.

The Company has certain convertible debt and convertible preferred stock investments that are accounted for under the cost method reflected in other assets in the Condensed Consolidated Balance Sheets. During the three months ended September 26, 2020, the Company recorded impairment charges of $0.1 million and during the nine months ended September 28, 2019, the Company recorded impairment charges of $2.8 million in *Other income, net* in the Condensed Consolidated Statements of Net Income to adjust these certain investments to their estimated fair value. As of September 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.

Mutual Funds

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 marketable securities are classified as Level 1 under the fair value hierarchy as they are maintained in mutual funds with readily determinable fair value and recorded in other assets.

There were no changes during the quarter ended September 26, 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 nine months ended September 26, 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 September 26, 2020 and December 28, 2019, the Company did not hold any 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 September 26, 2020:

	Fair Value Measurements Using			
(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	$ 92,472	$ —	$ —	$ 92,472
Investments in equity securities	15,042	—	—	15,042
Mutual funds	11,692	—	—	11,692

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)	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**	**Total**
Cash Equivalents	$ 118,999	$ —	$ —	$ 118,999
Investments in equity securities	12,969	—	—	12,969
Mutual funds	10,464	—	—	10,464

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, accounts receivable and its long-term debt. Due to their short-term maturity, the carrying amounts of cash and cash equivalents, short-term investments and accounts receivable approximate their fair values. The Company's revolving and term loan debt facilities' fair values approximate book value at September 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 September 26, 2020 and December 28, 2019 were as follows:

(in thousands)	September 26, 2020 Carrying Value	September 26, 2020 Estimated Fair Value	December 28, 2019 Carrying Value	December 28, 2019 Estimated Fair Value
Euro Senior Notes, Series A due 2023	$ 136,417	$ 136,686	$ 129,808	$ 131,710
Euro Senior Notes, Series B due 2028	110,766	114,947	105,400	110,336
USD Senior Notes, Series A due 2022	25,000	25,460	25,000	25,054
USD Senior Notes, Series B due 2027	100,000	109,367	100,000	102,548
USD Senior Notes, Series A due 2025	50,000	53,323	50,000	50,775
USD Senior Notes, Series B due 2030	125,000	138,340	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 6, *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:

(in thousands)	Nine Months Ended September 26, 2020 Impairment Charge	Nine Months Ended September 26, 2020 Estimated Fair Value Measurement (Level 3)	September 26, 2020 Carrying Value
Goodwill	$33,841	$8,953	$ 9,449

See Note 4, *Goodwill and Other Intangible Assets* for further discussion regarding goodwill impairment charges.

9. Benefit Plans

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

The Company recognizes interest cost, expected return on plan assets, and amortization of prior service, net within *Other income,, net* in the Condensed Consolidated Statements of Net Income. The components of net periodic benefit cost for the three and nine months ended September 26, 2020 and September 28, 2019 were as follows:

(in thousands)	For the Three Months Ended September 26, 2020	For the Three Months Ended September 28, 2019	For the Nine Months Ended September 26, 2020	For the Nine Months Ended September 28, 2019
Components of net periodic benefit cost:				
Service cost	$ 615	$ 509	$ 1,825	$ 1,523
Interest cost	511	777	1,655	2,374
Expected return on plan assets	(422)	(773)	(1,551)	(2,384)
Amortization of prior service and net actuarial loss	279	60	688	184
Net periodic benefit cost	$ 983	$ 573	$ 2,617	$ 1,697

The Company expects to make approximately $2.3 million of cash contributions to its pension plans in 2020.

The Company also sponsors certain post-employment plans in foreign countries and other statutory benefit plans. The Company recorded $0.5 million and $0.2 million expense for the three months ended September 26, 2020 and September 28, 2019, respectively, and $1.5 million and $0.6 million expense for the nine months ended September 26, 2020 and September 28, 2019, respectively, in *Cost of Sales* and *Other income, net* within the Condensed Consolidated Statements of Net Income. For three and nine months ended September 26, 2020, the pre-tax amounts recognized in other comprehensive income (loss) as components of net periodic benefit costs for these plans were $0.2 million and $0.5 million.

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 pay and administer pension payments to certain of the Company's U.K. pension plan participants, or their designated beneficiaries, who have been receiving pension payments. The purchase of this group annuity contract will reduce the Company's outstanding pension benefit obligation by approximately $36 million, representing approximately 30% 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 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 (£10.9 million) to both the net pension liability 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.

10. Other Comprehensive Income

Changes in other comprehensive income (loss) by component were as follows:

(in thousands)	**Three Months Ended September 26, 2020**			**Three Months Ended September 28, 2019**		
	Pre-tax	Tax	Net of Tax	Pre-tax	Tax	Net of Tax
Defined benefit pension plan and other adjustments	$ 273	$ (290)	$ 563	$ 155	$ 18	$ 137
Foreign currency translation adjustments	16,418	—	16,418	(17,163)	—	(17,163)
Total change in other comprehensive income (loss)	$ 16,691	$ (290)	$ 16,981	$ (17,008)	$ 18	$ (17,026)

(in thousands)	**Nine Months Ended September 26, 2020**			**Nine Months Ended September 28, 2019**		
	Pre-tax	Tax	Net of Tax	Pre-tax	Tax	Net of Tax
Defined benefit pension plan and other adjustments	$ (12,270)	$ (2,555)	$ (9,715)	$ 278	$ 29	$ 249
Foreign currency translation adjustments	9,300	—	9,300	(14,933)	—	(14,933)
Total change in other comprehensive loss	$ (2,970)	$ (2,555)	$ (415)	$ (14,655)	$ 29	$ (14,684)

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 9, *Benefits Plans* for further discussion.

The following tables set forth the changes in accumulated other comprehensive income (loss) by component for the nine months ended September 26, 2020 and September 28, 2019:

(in thousands)	Pension and postretirement liability and reclassification adjustments	Foreign currency translation adjustment	Accumulated other comprehensive (loss) income
Balance at December 28, 2019	$ (18,046)	$ (88,777)	$ (106,823)
Activity in the period	(9,715)	9,300	(415)
Balance at September 26, 2020	$ (27,761)	$ (79,477)	$ (107,238)

(in thousands)	Pension and postretirement liability and reclassification adjustments	Foreign currency translation adjustment	Accumulated other comprehensive (loss) income
Balance at December 29, 2018	$ (9,959)	$ (87,965)	$ (97,924)
Activity in the period	249	(14,933)	(14,684)
Balance at September 28, 2019	$ (9,710)	$ (102,898)	$ (112,608)

Amounts reclassified from accumulated other comprehensive income (loss) to earnings for the three and nine months ended September 26, 2020 and September 28, 2019 were as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Pension and Postemployment plans:				
Amortization of prior service and net actuarial loss	$ 452	$ 60	$ 1,226	$ 184

The Company recognizes the amortization of prior service costs in *Other income, net* within the Condensed Consolidated Statements of Net Income.

11. Income Taxes

The effective tax rate for the three and nine months ended September 26, 2020 was 17.9% and 23.1% respectively, compared to the effective tax rate for the three and nine months ended September 28, 2019 of 13.9% and 17.7%. The effective tax rates for the 2020 periods are higher than the effective tax rates for the comparable 2019 periods, primarily due to 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 did not result in a tax benefit in the annual estimated effective tax rate, as well as a reduction in the forecasted income earned in lower tax jurisdictions in 2020 driven by the uncertainty resulting from the impact of COVID-19.

The effective tax rate for the first nine months of 2020 is higher than the applicable U.S. statutory tax rate primarily due to 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 did not result in a tax benefit in the annual estimated effective tax rate, as well as the forecasted impact of non-U.S. losses and expenses with no tax benefit and the U.S. global intangible low-taxed income tax provisions (in the 2019 comparable period the impact of these items was more than offset by the impact of income earned in lower tax jurisdictions), offset in part by the impact of income earned in lower tax jurisdictions.

12. Earnings Per Share

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

	Three Months Ended		Nine Months Ended	
(in thousands, except per share amounts)	**September 26, 2020**	**September 28, 2019**	**September 26, 2020**	**September 28, 2019**
Numerator:				
Net income as reported	$ 55,356	$ 35,647	$ 71,009	$ 116,428
Denominator:				
Weighted average shares outstanding				
Basic	24,357	24,482	24,354	24,646
Effect of dilutive securities	216	202	181	248
Diluted	24,573	24,684	24,535	24,894
Earnings Per Share:				
Basic earnings per share	$ 2.27	$ 1.46	$ 2.92	$ 4.72
Diluted earnings per share	$ 2.25	$ 1.44	$ 2.89	$ 4.68

Potential shares of common stock relating to stock options and restricted share units excluded from the earnings per share calculation because their effect would be anti-dilutive were 290,262 and 205,516 for the three months ended September 26, 2020 and September 28, 2019, respectively, and 194,857 and 147,090 for the nine months ended September 26, 2020 and September 28, 2019, respectively.

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. The Company has suspended share repurchases for the near-term due to the uncertainty of the impact and duration of COVID-19 and to focus on other capital allocation priorities.

The Company did not repurchase any shares of its common stock for the three months ended September 26, 2020. During the three months ended September 28, 2019, the Company repurchased 311,786 shares of its common stock totaling $49.5 million. For the nine months ended September 26, 2020 and September 28, 2019, the Company repurchased 175,110 and 579,916 shares of its common stock totaling $22.9 million and $95.0 million, respectively.

13. Related Party Transactions

As a result of the Company's acquisition of IXYS, the Company has equity ownership 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.

(in millions)	For the Three Months Ended September 26, 2020 Powersem	EB Tech	ATEC	For the Three Months Ended September 28, 2019 Powersem	EB Tech	ATEC
Sales to related party	$ 0.4	$ —	$ —	$ 0.2	$ —	$ —
Purchase material/service from related party	0.8	—	2.4	0.8	0.1	1.7

(in millions)	For the Nine Months Ended September 26, 2020 Powersem	EB Tech	ATEC	For the Nine Months Ended September 28, 2019 Powersem	EB Tech	ATEC
Sales to related party	$ 1.1	$ —	$ —	$ 0.4	$ —	$ —
Purchase material/service from related party	1.8	—	5.8	2.4	0.3	5.5

(in millions)	September 26, 2020 Powersem	EB Tech	ATEC	December 28, 2019 Powersem	EB Tech	ATEC
Accounts Receivable balance	$ 0.1	$ —	$ —	$ —	$ —	$ —
Accounts Payable balance	0.1	—	0.1	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 September 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 Condensed 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.

14. 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 and automotive electronics, electric vehicle and related infrastructure, data and telecommunications, medical devices, alternative energy, consumer electronics and white goods.

- *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 include fuses and fuse accessories for internal combustion engine vehicles and 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 for the commercial vehicle industry. Automotive sensor products include a wide range of automotive and commercial vehicle products designed to monitor the passenger compartment occupants, safety and environment as well as the vehicle's powertrain.

- *Industrial Segment:* Consists of power fuses, protection relays and controls and other circuit protection products for use in various industrial applications such as oil, gas, mining, alternative energy, electric vehicle infrastructure, non-residential construction, HVAC systems, elevators and other industrial equipment.

Segment information is summarized as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	**September 26, 2020**	**September 28, 2019**	**September 26, 2020**	**September 28, 2019**
Net sales				
Electronics	$ 255,349	$ 227,252	$ 692,809	$ 752,199
Automotive	104,724	104,681	271,493	326,814
Industrial	31,493	30,038	80,697	86,337
Total net sales	$ 391,566	$ 361,971	$ 1,044,999	$ 1,165,350
Depreciation and amortization				
Electronics	$ 15,819	$ 14,960	$ 46,967	45,031
Automotive	7,370	7,067	21,628	20,848
Industrial	1,140	1,061	3,270	3,177
Total depreciation and amortization	$ 24,329	$ 23,088	$ 71,865	$ 69,056
Operating income				
Electronics	$ 45,860	$ 34,567	$ 110,783	$ 127,233
Automotive	15,383	11,437	20,642	34,987
Industrial	4,898	6,822	8,409	16,158
Other(a)	(1,583)	(5,659)	(42,476)	(17,904)
Total operating income	64,558	47,167	97,358	160,474
Interest expense	4,988	5,559	16,261	16,834
Foreign exchange (gain) loss	(6,174)	4,968	(9,600)	5,636
Other income, net	(1,682)	(4,764)	(1,643)	(3,406)
Income before income taxes	$ 67,426	$ 41,404	$ 92,340	$ 141,410

(a) Included in "Other" Operating income for the third quarter of 2020 is $0.3 million ($1.6 million year-to-date) of acquisition-related and integration charges related to the IXYS acquisition and other contemplated acquisitions. In addition, there was $1.3 million ($40.9 million year-to-date) of restructuring, impairment and other charges, primarily related to employee termination costs of $1.2 million ($4.6 million year-to-date), and other restructuring charges of $0.1 million ($0.2 million year-to-date), the goodwill impairment charge of $33.8 million recorded in the second quarter associated with the automotive sensors reporting unit within the Automotive segment, and impairment charges of $2.2 million recorded in the first quarter associated with the announced consolidation of a manufacturing facility within the Industrial segment. See Note 4, *Goodwill and Other Intangible Assets and* Note 6, *Restructuring, Impairment and Other Charges*, for further discussion.

Included in "Other" Operating income for the third quarter of 2019 is $3.2 million ($6.9 million year-to-date) of acquisition integration charges primarily related to the IXYS acquisition. In addition, there were $2.5 million ($11.0 million year-to-date) of restructuring charges primarily related to employee termination costs.

The Company's net sales by country were as follows:

	Three Months Ended		Nine Months Ended	
(in thousands)	**September 26, 2020**	**September 28, 2019**	**September 26, 2020**	**September 28, 2019**
Net sales				
United States	$ 106,121	$ 105,292	$ 285,901	$ 340,811
China	126,506	101,960	314,547	316,553
Other countries(a)	158,939	154,719	444,551	507,986
Total net sales	$ 391,566	$ 361,971	$ 1,044,999	$ 1,165,350

The Company's long-lived assets by country were as follows:

(in thousands)	**September 26, 2020**	**December 28, 2019**
Long-lived assets		
United States	$ 52,009	$ 58,081
China	82,956	88,306
Mexico	68,346	73,096
Germany	37,611	36,025
Philippines	64,171	51,738
Other countries(a)	34,777	37,371
Total long-lived assets	$ 339,870	$ 344,617

The Company's additions to long-lived assets by country were as follows:

	Nine Months Ended	
(in thousands)	**September 26, 2020**	**September 28, 2019**
Additions to long-lived assets		
United States	$ 2,712	$ 4,972
China	6,414	12,418
Mexico	7,291	12,650
Germany	3,793	4,335
Philippines	15,331	9,546
Other countries(a)	1,152	3,454
Total additions to long-lived assets	$ 36,693	$ 47,375

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

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

Cautionary Statement Regarding Forward-Looking Statements Under the Private Securities Litigation Reform Act of 1995 ("PSLRA").

Certain statements in this section and other parts of this Quarterly Report on Form 10-Q may constitute "forward-looking statements" within the meaning of the federal securities laws and are entitled to the safe-harbor provisions of the PSLRA. These statements include statements regarding the Company's future performance, as well as management's expectations, beliefs, intentions, plans, estimates or projections relating to the future. Such statements can be identified by the use of forward-looking terminology such as "believes," "expects," "may," "estimates," "will," "should," "plans" or "anticipates" or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy, although not all forward-looking statements contain such terms. 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" of this Quarterly Report on Form 10-Q for the quarter ended September 26, 2020, the Company's Annual Report on Form 10-K for the year ended December 28, 2019, and the Company's other filings and submissions with the Securities and Exchange Commission. The Company does not undertake any obligation to update or revise any forward-looking statements to reflect future events or circumstances, new information or otherwise.

This report, including the Management's Discussion and Analysis of Financial Condition and Results of Operations, should be read in conjunction with information provided in the consolidated financial statements and the related Notes thereto appearing in the Company's Annual Report on Form 10-K for the year ended December 28, 2019.

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is designed to provide information that is supplemental to, and should be read together with, the consolidated financial statements and the accompanying notes. Information in MD&A is intended to assist the reader in obtaining an understanding of (i) the consolidated financial statements, (ii) the changes in certain key items within those financial statements from year-to-year, (iii) the primary factors that contributed to those changes, and (iv) any changes in known trends or uncertainties that we are aware of and that may have a material effect on future performance. In addition, MD&A provides information about the Company's segments and how the results of those segments impact the results of operations and financial condition as a whole.

Executive 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 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.

The Company maintains a network of global laboratories and engineering centers that develop new products and product enhancements, provide customer application support and test products for safety, reliability, and regulatory compliance. 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.

Executive Summary

For the third quarter of 2020, the Company recognized net sales of $391.6 million compared to $362.0 million in the third quarter of 2019 representing an increase of $29.6 million, or 8.2%. The increase was primarily driven by higher volume in Electronics segment, and $4.4 million or 1.2% of favorable changes in foreign exchange rates. The Company recognized net income of $55.4 million, or $2.25 per diluted share, in the third quarter of 2020 compared to net income of $35.6 million, or $1.44 per diluted share in the third quarter of 2019. The increase in net income reflects higher operating income in the Electronics and Automotive segments, higher foreign exchange gains and lower acquisition-related and integration charges.

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 $164.3 million for the nine months ended September 26, 2020 as compared to $160.9 million for the nine months ended September 28, 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.

On March 25, 2020, the company borrowed $100.0 million from its current 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 existing 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 $60.0 million on the amended revolving credit facility during the three months ended September 26, 2020. The balance under the facility was $180.0 million as of September 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 pay and administer pension payments to certain of the Company's UK pension plan participants, or their designated beneficiaries, who have been receiving pension payments. The purchase of this group annuity contract will reduce the Company's outstanding pension benefit obligation by approximately $36 million, representing approximately 30% 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.

Impact of COVID-19 on Business

The Company continued to manage through the COVID-19 impacts during the third quarter, with a lesser impact to its financial results compared to the first six months of 2020. Our manufacturing facilities generally operated at normal capacity levels as production disruptions were minimal during the third quarter. The effects from COVID-19 continued to drive higher freight cost, as well as spending on personal protective equipment ("PPE"), additional personnel and employee transportation costs, partially offset by certain international government subsidies and 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 has enacted numerous proactive, aggressive actions at its facilities globally, 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 the first half of 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. During the third quarter, all of our manufacturing facilities have been operating and are generally 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 remainder of fiscal 2020.

Goodwill Impairment Assessment

The Company performs its annual goodwill impairment tests on the first day of the 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. As part of its interim review for indicators of impairment, management analyzed potential changes in the value of individual reporting units with goodwill based on each reporting unit’s operating results for the nine months ended September 26, 2020 compared to expected results. In addition, management considered how other key assumptions, including discount rates and expected long-term growth rates, used in last fiscal year’s impairment analysis, could be impacted by changes in market conditions and economic events. Management considered trends in these factors when performing its assessment of whether an interim impairment review was required for any reporting unit. Based on September 26, 2020 interim assessment, 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. Nevertheless, a continued global economic slowdown and further business disruption due to COVID-19 could result in changes to expectations of future financial results and key valuation assumptions.

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. The goodwill impairment charge was determined using Level 3 inputs, including discounted cash flow analysis and comparable marketplace fair value data. As of September 26, 2020, the automotive sensors reporting unit had $9.4 million of remaining goodwill.

The semiconductor reporting unit has experienced declines in net sales for the nine months ended September 26, 2020 due to temporary shut-downs of its plants as well as outsourced manufacturing partners and lower customer demand primarily due to COVID-19. The Company continues to evaluate the impact of COVID-19 on its long-term expectations for this unit. Further negative developments having a significant impact on the estimated fair value of this reporting unit could result in future goodwill impairment charges. As of the September 30, 2019 annual goodwill impairment test, the semiconductors reporting unit estimated fair value exceeded its book value by approximately 42%. As of September 26, 2020, $473.3 million of goodwill was allocated to the semiconductors reporting unit. The semiconductors reporting unit is included within the Electronics segment.

Risks Related to Market Conditions

While the Company has not historically or currently as of September 26, 2020 had significant credit risk on its accounts receivable, the impact of the COVID-19 pandemic and associated economic slowdown may increase the Company's credit risk on accounts receivable. It is possible that the Company's customers may experience liquidity issues which may impact the timing of the collections on receivables. The Company will continue to evaluate how the ongoing pandemic may impact collectability.

Results of Operations

The following table summarizes the Company's unaudited condensed consolidated results of operations for the periods presented. The third quarter of 2020 includes $0.3 million ($1.6 million year-to-date) of acquisition-related and integration charges related to the IXYS acquisition and other contemplated acquisitions. In addition, there were $1.3 million ($40.9 million year-to-date) of restructuring, impairment and other charges, primarily related employee termination costs of $1.2 million ($4.6 million year-to-date), and other restructuring charges of $0.1 million ($0.2 million year-to-date), the goodwill impairment charge of $33.8 million recorded in the second quarter associated with the automotive sensors reporting unit within the Automotive segment, and impairment charges of $2.2 million recorded in the first quarter associated with the announced consolidation of a manufacturing facility within the Industrial segment.

The third quarter of 2019 includes $5.7 million ($17.9 million year-to-date) of non-segment charges, of which $2.5 million ($11.0 million year-to-date) of restructuring charges are primarily related to employee termination costs and other restructuring charges and $3.2 million ($6.9 million year-to-date) of acquisition-related and integration charges are primarily related to the IXYS acquisition and other contemplated acquisitions.

	Third Quarter				First Nine Months			
(in thousands)	**2020**	**2019**	**Change**	**% Change**	**2020**	**2019**	**Change**	**% Change**
Net sales	$ 391,566	$ 361,971	$ 29,595	8.2 %	$ 1,044,999	$ 1,165,350	$ (120,351)	(10.3)%
Gross profit	138,176	130,946	7,230	5.5 %	360,987	427,982	(66,995)	(15.7)%
Operating expenses	73,618	83,779	(10,161)	(12.1)%	263,629	267,508	(3,879)	(1.5)%
Operating income	64,558	47,167	17,391	36.9 %	97,358	160,474	(63,116)	(39.3)%
Income before income taxes	67,426	41,404	26,022	62.8 %	92,340	141,410	(49,070)	(34.7)%
Income taxes	12,070	5,757	6,313	109.7 %	21,331	24,982	(3,651)	(14.6)%
Net income	$ 55,356	$ 35,647	$ 19,709	55.3 %	$ 71,009	$ 116,428	$ (45,419)	(39.0)%

Net Sales

Net sales increased $29.6 million or 8.2% for the third quarter of 2020 compared to the third quarter of 2019 primarily due to higher volume in Electronics segment, and $4.4 million or 1.2% of favorable changes in foreign exchange rates.

Net sales decreased $120.4 million or 10.3% for the first nine months of 2020 compared to the first nine months of 2019 primarily due to lower volume driven by the disruption across the Electronics and Automotive segments due to temporary closures of manufacturing facilities in the first half of the fiscal year resulting from government directives due to the impact of

COVID-19, lower volume across the Electronics segment from electronics distribution partners and end customers reducing excess inventories and production, and lower volume across the Automotive segment due to a decline in global auto production driven by lower global end market demand, and $1.2 million or 0.1% of unfavorable changes in foreign exchange rates.

Gross Profit

Gross profit was $138.2 million, or 35.3% of net sales, in the third quarter of 2020 compared to $130.9 million, or 36.2% of net sales, for the third quarter of 2019. The increase in gross profit is primarily due to higher volume in the Electronics segment, partially offset by higher freight, supplies and other costs due to the impact of COVID-19. The decrease in gross margin is primarily due to unfavorable price and product mix and changes in foreign exchange rates.

Gross profit was $361.0 million, or 34.5% of net sales, in the first nine months of 2020 compared to $428.0 million, or 36.7% of net sales, for the first nine months of 2019. The decrease in gross profit reflected lower volume across all segments. The decrease in gross margin is primarily due to lower volumes across the Electronics and Automotive segments, additional costs associated with government-directed plant shutdowns and supply chain constraints, higher freight, supplies and other costs due to the impact of COVID-19, and unfavorable price and product mix.

Operating Expenses

Total operating expenses were $73.6 million, or 18.8% of net sales, for the third quarter of 2020 compared to $83.8 million, or 23.1% of net sales, for the third quarter of 2019. The decrease in operating expenses of $10.2 million is primarily due to lower research and development expenses of $6.7 million, a reduction in acquisition-related and integration charges of $2.9 million and reduced incentive compensation and travel expenses due to COVID-19.

Total operating expenses were $263.6 million, or 25.2% of net sales, for the first nine months of 2020 compared to $267.5 million, or 23.0% of net sales, for the first nine months of 2019. The decrease in operating expenses of $3.9 million is primarily due to lower research and development expenses of $21.6 million, lower incentive compensation, sales commissions and travel expenses due to COVID-19, and a $5.3 million reduction in acquisition-related and integration charges, partially offset by the second quarter goodwill impairment charge of $33.8 million, or 3.2% 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 was $64.6 million, an increase of $17.4 million, or 36.9%, for the third quarter of 2020 compared to $47.2 million for the third quarter of 2019. The increase is primarily due to higher gross margin in the Electronics segment and the lower operating expenses noted above. Operating margins increased from 13.0% in the third quarter of 2019 to 16.5% in the third quarter of 2020 driven by the factors mentioned above.

Operating income was $97.4 million, a decrease of $63.1 million, or 39.3%, for the first nine months of 2020 compared to $160.5 million for the first nine months of 2019. The decrease in operating income is primarily due to lower gross margin across all segments and higher operating expenses noted above. Operating margins decreased from 13.8% in the first nine months of 2019 to 9.3% in the first nine months of 2020 driven by the factors mentioned above. The second quarter goodwill impairment charge of $33.8 million negatively impacted the operating margin by 3.2% for the first nine months of 2020.

Income Before Income Taxes

Income before income taxes was $67.4 million, or 17.2% of net sales, for the third quarter of 2020 compared to $41.4 million, or 11.4% of net sales, for the third quarter of 2019. In addition to the factors impacting comparative results for operating income discussed above, income before income taxes was primarily impacted by foreign exchange gains of $6.2 million during the three months ended September 26, 2020 compared to foreign exchange losses of $5.0 million, lower interest expense of $0.6 million, partially offset by lower interest income of $1.1 million and a reduction in investment gains of $1.0 million associated with our equity investments during the three months ended September 26, 2020 compared to the three months ended September 28, 2019.

Income before income taxes was $92.3 million, or 8.8% of net sales, for the first nine months of 2020 compared to $141.4 million, or 12.1% of net sales, for the first nine months of 2019. In addition to the factors impacting comparative results for operating income discussed above, income before income taxes was impacted by foreign exchange gains of $9.6 million during the nine months ended September 26, 2020 compared to foreign exchange losses of $5.6 million during the nine months ended

September 28, 2019, impairment charges of $3.1 million for certain other investments and a $2.6 million loss on the disposal of a business within the Electronics segment during the nine months ended September 28, 2019, partially offset by a $1.5 million increase in coal mining reserves, $1.5 million decreases in investment gains associated with our equity investments, and lower interest income of $1.0 million during the nine months ended September 26, 2020 compared to the nine months ended September 28, 2019

Income Taxes

Income tax expense for the third quarter of 2020 was $12.1 million, or an effective tax rate of 17.9%, compared to income tax expense of $5.8 million, or an effective tax rate of 13.9%, for the the third quarter of 2019. The effective tax rate for the third quarter of 2020 is higher than the effective tax rate for the comparable 2019 period, primarily due to 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 did not result in a tax benefit in the annual estimated effective tax rate, as well as a reduction in the forecasted income earned in lower tax jurisdictions in 2020 driven by the uncertainty resulting from the impact of COVID-19.

Income tax expense for the first nine months of 2020 was $21.3 million, or an effective tax rate of 23.1%, compared to income tax expense of $25.0 million, or an effective tax rate of 17.7%, for the first nine months of 2019. The effective tax rate for the first nine months of 2020 is higher than the effective tax rate for the comparable 2019 period, primarily due to 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 did not result in a tax benefit in the annual estimated effective tax rate, as well as a reduction in the forecasted income earned in lower tax jurisdictions in 2020 driven by the uncertainty resulting from the impact of COVID-19.

The effective tax rate for the first nine months of 2020 is higher than the applicable U.S. statutory tax rate primarily due to 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 did not result in a tax benefit in the annual estimated effective tax rate, as well as the forecasted impact of non-U.S. losses and expenses with no tax benefit and the U.S. global intangible low-taxed income tax provisions (in the 2019 comparable period the impact of these items was more than offset by the impact of income earned in lower tax jurisdictions), offset in part by the impact of income earned in lower tax jurisdictions.

Segment Results of Operations

The Company reports its operations by the following segments: Electronics, Automotive and Industrial. Segment information is described more fully in Note 14, *Segment Information*, of the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report.

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

	Third Quarter				First Nine Months			
(in thousands)	**2020**	**2019**	**Change**	**% Change**	**2020**	**2019**	**Change**	**% Change**
Electronics	$ 255,349	$ 227,252	$ 28,097	12.4 %	$ 692,809	$ 752,199	$ (59,390)	(7.9)%
Automotive	104,724	104,681	43	— %	271,493	326,814	(55,321)	(16.9)%
Industrial	31,493	30,038	1,455	4.8 %	80,697	86,337	(5,640)	(6.5)%
Total	$ 391,566	$ 361,971	$ 29,595	8.2 %	$ 1,044,999	$ 1,165,350	$ (120,351)	(10.3)%

Electronics Segment

Net sales increased $28.1 million, or 12.4%, in the third quarter of 2020 compared to the third quarter of 2019 primarily due to higher volume in the semiconductor and electronics products businesses and favorable changes in foreign exchange rates of $2.4 million.

Net sales decreased $59.4 million, or 7.9%, in the first nine months of 2020 compared to the first nine months of 2019 primarily due to lower volume in the semiconductor and electronics products businesses driven by the production disruption due to temporary closures of manufacturing facilities resulting from government directives due to the impact of COVID-19, lower volume from electronics distribution partners and end customers reducing excess inventories, and unfavorable changes in foreign exchange rates of $0.6 million.

Automotive Segment

Net sales were flat in the third quarter of 2020 compared to the third quarter of 2019 as favorable changes in foreign exchange rates of $2.0 million and increased volume in auto sensor business were offset by decreased volume in the passenger car products and commercial vehicle businesses.

Net sales decreased $55.3 million, or 16.9%, in the first nine months of 2020 compared to the first nine months of 2019 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, a decline in global auto production driven by lower global end market demand and temporary closures of customer manufacturing facilities, and unfavorable changes in foreign exchange rates of $0.4 million.

Industrial Segment

Net sales increased by $1.5 million, or 4.8%, in the third quarter of 2020 compared to the third quarter of 2019 primarily due to the transfer of the temperature sensor product line totaling $2.3 million which was previously reported in the Electronics segment, partially offset by lower volume in the relay business.

Net sales decreased by $5.6 million, or 6.5%, in the first nine months of 2020 compared to the first nine months of 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, and unfavorable changes in foreign exchange rates of $0.2 million, 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:

	Third Quarter				First Nine Months			
(in thousands)	**2020**	**2019**	**Change**	**% Change**	**2020**	**2019**	**Change**	**% Change**
Asia-Pacific	$ 186,956	$ 158,778	$ 28,178	17.7 %	$ 483,566	$ 504,453	$ (20,887)	(4.1)%
Americas	123,739	122,754	985	0.8 %	333,891	396,683	(62,792)	(15.8)%
Europe	80,871	80,439	432	0.5 %	227,542	264,214	(36,672)	(13.9)%
Total	$ 391,566	$ 361,971	$ 29,595	8.2 %	$ 1,044,999	$ 1,165,350	$ (120,351)	(10.3)%

Asia-Pacific

Net sales increased $28.2 million, or 17.7%, in the third quarter of 2020 compared to the third quarter of 2019. The increase in net sales was primarily due to higher volume across all businesses within the Electronics segment, and favorable changes in foreign exchange rates of $1.0 million.

Net sales decreased $20.9 million, or 4.1%, in the first nine months of 2020 compared to the first nine months of 2019. The decrease in net sales was primarily due to lower volume across all businesses within the Electronics segment and lower volume in the passenger car products business within the Automotive segment, and unfavorable changes in foreign exchange rates of $1.1 million.

Americas

Net sales increased $1.0 million, or 0.8%, in the third quarter of 2020 compared to the third quarter of 2019 primarily due to higher volume in the electronics products business within the Electronics segment, partially offset by lower volume in the commercial vehicle business within the Automotive segment and unfavorable changes in foreign exchange rates of $0.1 million.

Net sales decreased $62.8 million, or 15.8%, in the first nine months of 2020 compared to the first nine months of 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, lower volume across the Electronics segment from electronics distribution partners and end customers reducing excess inventories and production, lower volume in all businesses within the Automotive segment and unfavorable changes in foreign exchange rates of $0.3 million.

Europe

Net sales increased $0.4 million, or 0.5%, in the third quarter of 2020 compared to the third quarter of 2019. The increase in net sales was primarily due to favorable changes in foreign exchange rates of $3.5 million and increased volume in auto sensor business within the Automotive segment, mostly offset by lower volume in the semiconductor business within the Electronics segment.

Net sales decreased $36.7 million, or 13.9%, in the first nine months of 2020 compared to the first nine months of 2019. The decrease in net sales was primarily due to lower volume in the semiconductor business within the Electronics segment, lower volume in all businesses within the Automotive segment, partially offset by favorable changes in foreign exchange rates of $0.2 million.

Liquidity and Capital Resources

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.

Cash and cash equivalents were $641.9 million as of September 26, 2020, an increase of $110.8 million as compared to December 28, 2019. As of September 26, 2020, $266.2 million of the Company's $641.9 million cash and cash equivalents was held by U.S. subsidiaries.

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 included 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 could 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 coronavirus disease 2019 ("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 $60.0 million on the amended revolving credit facility during the three months ended September 26, 2020. The balance under the facility was $180.0 million as of September 26, 2020.

Outstanding borrowings under the amended Credit Agreement bears 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 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 amended Credit Agreement included 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 1.90% at September 26, 2020.

As of September 26, 2020, the Company had no amount outstanding in letters of credit and had available $245.1 million of borrowing capacity under the Revolving Credit Facility based on financial covenants. At September 26, 2020, the Company was in compliance with all covenants under the Credit Agreement.

Further information regarding the Company's credit agreement is provided in Note 7, *Debt*, of the Notes to the Condensed Consolidated Financial Statements included in this Quarterly Report.

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 on August 15, 2018. Further information regarding the Company's Senior Notes is provided in Note 7, *Debt*, of the Notes to the Condensed Consolidated Financial Statements included in this Quarterly Report.

Debt Covenants

The Company was in compliance with all covenants under the Credit Agreement and Senior Notes as of September 26, 2020 and currently expects to remain in compliance based on management's estimates of operating and financial results for 2020. As of September 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. 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 products, as well as the effect of governmental regulations imposed in response to the pandemic. While we cannot at this time predict the impact of the COVID-19, it could have a material negative impact on our business, financial condition, results of operations and future cash flows which could impact the Company's ability to comply with debt covenants in the future.

Dividends

During the third quarter of 2020 the Company paid quarterly dividends of $11.7 million to the shareholders. On October 23, 2020, the Board of Directors of the Company declared a quarterly cash dividend of $0.48 per share, payable on December 3, 2020 to stockholders of record as of November 19, 2020. Future determinations regarding the declaration and payment of dividends will be at the discretion of our board of directors and will depend on then-existing conditions, including our results of operations, payout ratio, capital requirements, financial condition, prospects and other factors that our board of directors may deem relevant.

Cash Flow Overview

	First Nine Months	
(in thousands)	**2020**	**2019**
Net cash provided by operating activities	$ 164,256	$ 160,863
Net cash used in investing activities	(41,388)	(32,960)
Net cash used in financing activities	(18,376)	(135,465)
Effect of exchange rate changes on cash and cash equivalents	6,259	(6,114)
Increase (decrease) in cash and cash equivalents	110,751	(13,676)
Cash and cash equivalents at beginning of period	531,139	489,733
Cash and cash equivalents at end of period	$ 641,890	$ 476,057

Cash Flow from Operating Activities

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.

Net cash provided by operating activities was $164.3 million for the nine months ended September 26, 2020, compared to $160.9 million during the nine months ended September 28, 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 $41.4 million for the nine months ended September 26, 2020 compared to $33.0 million during the nine months ended September 28, 2019. Capital expenditures were $41.5 million, representing an increase of $3.1 million compared to 2019. During the nine months ended September 28, 2019, the Company received proceeds of $6.4 million from the sale of a property within the Industrial segment.

Cash Flow from Financing Activities

Net cash used in financing activities was $18.4 million for the nine months ended September 26, 2020 compared to $135.5 million for the nine months ended September 28, 2019. During the nine months ended September 26, 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 $60.0 million on the amended revolving credit facility during the third quarter of 2020. The Company made principal payments of $5.0 million and $7.5 million on the term loan during the nine months ended September 26, 2020 and September 28, 2019, respectively. For the nine months ended September 26, 2020 and September 28, 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 nine months ended September 28, 2019. Additionally, dividends paid increased $2.1 million from $33.0 million in the nine months ended September 28, 2019 to $35.1 million for the nine months ended September 26, 2020.

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 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. The 2019 program expired on April 30, 2020 with 324,890 of authorized repurchases remaining. The Company has suspended share repurchases for the near-term due to the uncertainty of the impact and duration of COVID-19 and to focus on other capital allocation priorities.

The Company did not repurchase shares of its common stock during the three months ended September 26, 2020, and for the three months ended September 28, 2019, the Company repurchased 311,786 shares of its common stock totaling $49.5 million. For the nine months ended September 26, 2020 and September 28, 2019, the Company repurchased 175,110 and 579,916 shares of its common stock totaling $22.9 million and $95.0 million, respectively.

Off-Balance Sheet Arrangements

As of September 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.

Critical Accounting Policies and Estimates

The Company’s Condensed Consolidated Financial Statements are prepared in accordance with U.S. GAAP. In connection with the preparation of the Condensed Consolidated Financial Statements, the Company uses estimates and makes judgments and assumptions about future events that affect the reported amounts of assets, liabilities, revenue, expenses, and the related disclosures. The assumptions, estimates, and judgments are based on historical experience, current trends, and other factors the Company believes are relevant at the time it prepares the Condensed Consolidated Financial Statements.

The significant accounting policies and critical accounting estimates are consistent with those discussed in Note 1, Summary of Significant Accounting Policies and Other Information, to the consolidated financial statements and the MD&A section of the Company’s Annual Report on Form 10-K for the year ended December 28, 2019. During the nine months ended September 26, 2020, there were no significant changes in the application of critical accounting policies.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

See Item 7A, Quantitative and Qualitative Disclosures about Market Risk, of our Annual Report on Form 10-K for the year ended December 28, 2019. During the nine months ended September 26, 2020, there have been no material changes in our exposure to market risk.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures (as defined in Rules 13a-15(b) and 15d-15(e) under the Exchange Act) are designed to ensure that information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

In connection with the preparation of this report, management, under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of September 26, 2020. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the quarter ended September 26, 2020, our disclosure controls and procedures were effective.

(b) Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(f) and 15d-15(f) under the Exchange Act that occurred during the quarter ended September 26, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

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 has declared the COVID-19 outbreak a pandemic, 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 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* of our Form 10-K, 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.

Other than the item listed above, there have been no material changes in our risk factors from those disclosed in our Annual Report on Form 10-K for our year ended December 28, 2019.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities

On May 1, 2019, the Company announced that its Board of Directors authorized 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 its 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 were 324,890 shares authorized to be repurchased under the 2019 program when it expired.

The Company did not repurchase shares of its common stock during the three months ended September 26, 2020. There are 1,000,000 shares available to be repurchased as of September 26, 2020 under the 2020 program.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit	Description
10.1*	Amended and Restated Littelfuse Deferred Compensation Plan for Non-Employee Directors. ++
31.1*	Certification of David W. Heinzmann, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Meenal A. Sethna, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information from LITTELFUSE, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 26, 2020 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Net Income, (iii) the Condensed Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Stockholders Equity , (v) the Condensed Consolidated Statements of Cash Flows, and (vi) Notes to the Condensed Consolidated Financial Statements.
104	The cover page from this Quarterly Report on Form 10-Q for the quarter ended September 26, 2020, formatted in Inline XBRL.

++ Management contract or compensatory plan or arrangement.
* Filed herewith.
** Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q for the quarter ended September 26, 2020, to be signed on its behalf by the undersigned thereunto duly authorized.

	Littelfuse, Inc.
	By: /s/ Meenal A. Sethna Meenal A. Sethna Executive Vice President and Chief Financial Officer
Date: October 28, 2020	By: /s/ Jeffrey G. Gorski Jeffrey G. Gorski Vice President and Chief Accounting Officer

AMENDED AND RESTATED LITTELFUSE
DEFERRED COMPENSATION PLAN FOR NON-EMPLOYEE DIRECTORS

ARTICLE I
PURPOSE OF THE PLAN

The purpose of the Littelfuse Deferred Compensation Plan for Non-Employee Directors (the "***Plan***") is to promote the ownership by non-employee directors of Littelfuse, Inc., a Delaware corporation (the "***Company***"), of shares of common stock, $.01 par value, of the Company (the "***Company Common Stock***"), by allowing them to elect to receive shares of the Company Common Stock in lieu of their receiving some or all of the cash compensation which they would otherwise be entitled to receive as payment for their services as directors of the Company. The Company believes that ownership of the Company Common Stock by its non-employee directors aligns the interests of such non-employee directors more closely with the interests of the stockholders of the Company and that the Plan will also assist the Company in attracting and retaining highly qualified persons to serve as non-employee directors of the Company.

The Plan was last amended and restated effective March 17, 2005 and amended on January 1, 2008 and October 25, 2013. This Plan is hereby amended and restated effective August 1, 2020 in its entirety, in order to incorporate all prior amendments and to make certain additional amendments.

ARTICLE II
ELECTIONS BY ELIGIBLE DIRECTORS

Section 2.1. Eligibility. Any person who is serving as a member of the Board of Directors (the "***Board***") of the Company and who is not an employee of the Company or any of its subsidiaries shall be eligible to participate under the Plan (hereinafter referred to individually as an "***Eligible Director***" and collectively as the "***Eligible Directors***").

Section 2.2. Compensation. As used herein, the term "***Compensation***" shall mean any and all fees and retainers payable in cash to an Eligible Director by the Company for his or her services as a director, including, without limitation, his or her annual retainer and meeting fees. An Eligible Director shall be deemed to have earned one-fourth of his or her annual retainer fee on the date of each of the four regularly-scheduled Board meetings, whether or not he or she attends such meeting.

Section 2.3. Compensation Deferrals. An Eligible Director may, by filing a written election with the Secretary of the Company from time to time, direct the Company to defer some or all of his or her Compensation in such amount or percentage as specified by such Eligible Director and to credit the amount of such deferral to such Eligible Director's Deferred Compensation Account. Such election may be made within 30 days after an Eligible Director is first elected to the Board. If not made during such 30-day period, the election may be made prior to the beginning of any subsequent year, and shall take effect on the first day of such subsequent year.

Deferred amounts shall be credited to Deferred Compensation Accounts on the date that the applicable retainer or meeting fees would otherwise be paid to members of the Board, which is usually during the week following each regularly-scheduled Board meeting to be made as of the date that such Compensation is deemed to have been earned by such Eligible Director.

Section 2.4. Elections. Once an election by an Eligible Director to defer some or all of his or her Compensation becomes effective pursuant to this Article, such election shall remain in effect until written notice terminating or amending said election is delivered by said Eligible Director to the Secretary of the Company (or his or her designee). Any termination or amendment of an election shall take effect on the first day of the year following the year in which the notice is delivered to the Secretary.

Section 2.5. Maximum Number of Shares. The maximum number of shares of Company Common Stock (“***Shares***”) which may be issued pursuant to the Plan shall be 160,000 shares.

ARTICLE III
ESTABLISHMENT OF AND CONTRIBUTIONS TO TRUST

Section 3.1. Establishment of Trust. The Company shall establish a rabbi trust (the "***Trust***") with a trustee approved by the Board (the "***Trustee***") pursuant to a trust agreement approved by the Board (the "***Trust Agreement***") for the purpose of holding cash and Shares for the benefit of the Eligible Directors.

Section 3.2. Establishment of Accounts. The Trustee shall establish a separate account under the Trust for each Eligible Director who elects to defer Compensation pursuant to the Plan, to which all deferred Compensation described in Section 2.3 shall be credited.

Section 3.3. Contribution of Shares to Accounts. Each quarter, on or about the same date that deferred amounts are credited to Accounts pursuant to Section 2.3 above (the “***Purchase Date***”), the Company shall deliver instructions to the Trustee to apply any cash credited to each Eligible Director’s Account as of such Purchase Date to purchase a number of Shares equal to the balance of the Eligible Director's Account divided by the Current Market Price; provided, however, that no fractional Shares shall be issued. As used herein, the term "***Current Market Price***" with respect to each such issuance of shares shall mean the closing price for Shares on the NASDAQ Global Select Market on the trading day immediately prior to such Purchase Date.

Section 3.4. Dividends and Distributions. All dividends payable in cash with respect to any Shares held in the Trust for the benefit of an Eligible Director which are received by the Trustee shall be reinvested by the Trustee in Shares, either pursuant to purchases from the Company or from third parties, credited to the Account of such Eligible Director. All non-cash dividends or other distributions with respect to any Shares held in the Trust for the benefit of an

Eligible Director which are received by the Trustee, or any shares of stock or other securities of another entity into which such Shares shall be converted or exchanged pursuant to a merger, consolidation, exchange offer or other transaction which are received by the Trustee, shall be credited to such Eligible Director’s Account.

Section 3.5. Voting of Shares. All Shares or other voting securities credited to an Eligible Director's Account shall be voted by and in the discretion of the Trustee.

Section 3.6. Trustee's Fees. All fees and expenses of the Trustee under the Trust Agreement shall be paid by the Company.

Section 3.7. Vesting. Except as otherwise provided in Article V hereof, the interests of the Eligible Directors in their respective Accounts and shall at all times be fully vested and non-forfeitable.

ARTICLE IV
DISTRIBUTION OF ACCOUNTS

Section 4.1. Time of Distribution. Distribution of any amounts or assets credited to an Eligible Director's Account shall commence or be made in the manner described in Section 4.2 hereof within ten (10) days after the earlier of:

(i) the date of the Eligible Directors’ termination of service on the Board on account of resignation, removal, replacement, retirement, death or otherwise; or

(ii) the date the Board determines that it is in the best interests of the Company or such Eligible Director that such distribution shall be made; provided, however, that such Eligible Director must abstain from voting on or with respect to, and may not otherwise participate in, any such determination; and provided further, that the Board may only direct a distribution pursuant to clause (ii) of any amount that was deferred on or after January 1, 2005 (or the income attributable to such amounts) to the extent the Board determines that such distribution is necessary to alleviate an unforeseeable emergency, including any tax imposed on the distribution. For purposes of the preceding sentence, an unforeseeable emergency means a severe financial hardship to the Eligible Director resulting from an illness or accident of the Eligible Director (or the Eligible Director's spouse, Beneficiary, or tax dependent); loss of the Eligible Director's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster); or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Eligible Director, determined in accordance with regulations or other guidance promulgated under Section 409A of the Internal Revenue Code of 1986 ("***Section 409A***"). For purposes of this Section 4.1, an Eligible Director shall not be considered to have terminated his or her service on the Board until he has incurred a “separation from service” as defined in Section 409A.

Notwithstanding any provision in the Plan to the contrary, if at the time of an Eligible Director's separation from service he or she is a "specified employee" (within the meaning of that term under Internal Revenue Code Section 409(a)(2)(B) and determined using any identification methodology and procedure selected by the Company from time to time, or if none, the default methodology and procedure specified under Section 409A), then any payment under this Plan that is considered "nonqualified deferred compensation" under Section 409A that is payable on account of the Eligible Director's separation from service shall be delayed until the date which is the earlier of (A) the expiration of six (6) months following the date of the Eligible Director's separation from service, and (B) the date of the Eligible Director's death, at which time all payments delayed pursuant to this paragraph shall be paid to the Eligible Director in a lump sum, and any remaining payments due under this Plan shall be paid or provided in accordance with the normal payment dates specified for them in this Plan. The above specified employee delay shall not apply to any payments that are excepted from coverage by Section 409A.

Section 4.2. Method of Distribution.

(a) At the time of an Eligible Director's initial election described in Article II, the Eligible Director making such election shall specify in a written notice delivered to the Secretary of the Company (or his or her designee) whether the amounts and assets credited to his or her Account shall be distributed to him or her (or his or her beneficiary) in a single lump sum distribution at the time described in Section 4.1, or in not more than ten (10) annual installments. The first such installment shall be paid at the time described in Section 4.1, and subsequent payments shall be made on each anniversary of such date. The amount of each such installment shall be equal to the cash balance and the number of Shares in his or her Account immediately prior to the distribution; in each case divided by the number of installments remaining to be paid (with Shares rounded to the next higher number of whole Shares). If an Eligible Director shall fail to make such an election, he or she shall be deemed to have elected a lump sum distribution.

(b) The Eligible Director may change his or her distribution election from time to time by delivering written notice to the Secretary of the Company (or his or her designee), subject to the following. No change in a distribution election may be made within one year before the Eligible Director terminates his or her service on the Board, and if an Eligible Director's service on the Board is terminated within one year after notice of any such change is given to the Secretary, such change will be null and void. If an Eligible Director changes his or her distribution election, then the portion of his or her Account, and the number of Shares in his or her Account attributable to amounts deferred after December 31, 2004, and before the first day of the year following the year in which the notice of such change is given to the Secretary (including amounts attributable to earnings), shall be distributed (or begin to be distributed in the case of installments) on the day that is five (5) years after the date such amount would have been distributed had such change not been made. For purposes of Section 409A, payment in installments shall be considered a single payment.

(c) Any amounts or assets credited to an Eligible Director's Account shall be distributed or commence to be distributed to such Eligible Director or his or her beneficiary at the time described in Section 4.1 in the manner so specified. If the Company is not Insolvent (as hereinafter defined) at the time of any distribution, the distributions shall be made from the Eligible Director’s Account and charged to the Eligible Director’s Account.

Section 4.3. Designation of Beneficiary. Each Eligible Director participating in the Plan shall designate a beneficiary or beneficiaries to whom distributions shall be made pursuant to Section 4.2 in the event of the death of the Eligible Director before his or her entire Account is distributed. If there is no designated beneficiary, or no designated beneficiary surviving at an Eligible Director's death, the Eligible Director's beneficiary shall be his or her estate. Beneficiary designations shall be made in writing. An Eligible Director may designate a new beneficiary or beneficiaries at any time by filing a new election with the Secretary of the Company (or his or her designee).

Section 4.4. Taxes. In the event any taxes are required by law to be withheld or paid from any distributions made pursuant to the Plan, the Company or Trustee (as applicable) shall deduct the amount of such taxes from such distributions and shall transmit the withheld amounts to the appropriate taxing authority or obtain payment from the appropriate Eligible Director of the amount of any such taxes prior to any such distributions.

ARTICLE V
CREDITORS AND INSOLVENCY

Section 5.1. Claims of the Company's Creditors. All balances in the Accounts and any issuances of Shares to be made by the Company and any distribution to be made by the Trustee pursuant to the Plan and Trust Agreement, shall be subject to the claims of the general creditors of the Company, including judgment creditors and bankruptcy creditors. The rights of an Eligible Director or his or her beneficiaries to any assets of the Company or the Trust shall be no greater than the rights of an unsecured creditor of the Company.

Section 5.2. Notification of Insolvency. In the event the Company becomes Insolvent, the Board or the President of the Company shall promptly notify the Trustee of that fact. In the event the Company becomes Insolvent, the Company shall not issue any further Shares under the Plan. The Trustee shall not make any further distributions from the Trust to any Eligible Director or any beneficiary under the Plan after such notification that the Company is Insolvent is received or at any time after the Trustee has knowledge that the Company is Insolvent. Under any such circumstance, the Trustee shall deliver any property held in the Trust only as a court of competent jurisdiction may direct to satisfy the claims of the Company's creditors or otherwise. For purposes of this Plan, the Company shall be deemed to be "***Insolvent***" if the Company is subject to a pending voluntary or involuntary proceeding as a debtor under the United States Bankruptcy Code, as amended, or is unable to pay its debts as they become due.

ARTICLE VI
MISCELLANEOUS

Section 6.1. Funding. Neither any Eligible Director, nor his or her beneficiaries, nor his or her heirs, successors or assigns, shall have any secured interest in or claim on any property or assets of the Company or the Trust under or pursuant to the Plan or otherwise. The Company's obligation under the Plan shall be merely that of an unfunded and unsecured promise of the Company to credit certain amounts to the Accounts and to issue and deliver Shares to the Trustee for the benefit of the Eligible Directors. The Company shall fund the Trust in accordance with the terms of the Plan, but all assets contained therein shall be and remain subject to the claims of the Company's general creditors as provided in Article V hereof.

Section 6.2. Term of Plan. The Board reserves the right to amend the Plan or Trust Agreement or terminate the Plan or Trust at any time; provided, however, that no amendment or termination shall affect the rights of Eligible Directors to amounts or assets previously credited to their Accounts and, provided further, that the Plan may not be amended more than once every six months, other than to comport with changes in the Code or the Employee Retirement Income Security Act, as amended, or the rules thereunder, if such amendment would cause the Plan not to be in compliance with Rule 16b-3 under the Securities Exchange Act of 1934. Notwithstanding the foregoing, the Trust shall remain in effect until such time as the entire corpus of the Trust has been distributed pursuant to the terms of the Trust Agreement, and the Plan shall remain in effect until such time as all amounts credited to Eligible Directors' Accounts are distributed pursuant to Article IV hereof.

Section 6.3. Assignment. No right or interest of any Eligible Director or his or her beneficiary (or any person claiming through or under such Eligible Director or his or her beneficiary) in any benefit or payment under the Plan or the Trust shall be assignable or transferable in any manner or be subject to alienation, anticipation, sale, pledge, encumbrance or other legal process or in any manner be liable for or subject to the debts or liabilities of such Eligible Director.

Section 6.4. Tax Effect. This Plan is intended to be treated as an unfunded deferred compensation plan under the Internal Revenue Code of 1986, as amended (the "***Code***") and, with respect to amounts deferred on and after January 1, 2005, to comply in all respects with the requirements of Section 409A and, to the maximum extent permitted by law, the Plan shall be so construed and administered. It is the intention of the Company that the amounts of Compensation which an Eligible Director elects to have deferred pursuant to the Plan shall not be include in the gross income of such Eligible Director or his or her beneficiaries until such time as the amounts or assets credited to such Eligible Director's Account are distributed to the Eligible Director or his or her beneficiary under the Plan. If at any time any amount attributable to the Eligible Directors' Accounts are includible in the gross income of any Eligible Director or his or her beneficiary before distribution pursuant to Article IV, the amount includible in income shall be immediately distributed to the respective Eligible Director or beneficiary. Distributions described in the preceding sentence shall only be made from the Trust if the Company is not Insolvent at the time for such distribution.

Section 6.5. Compliance with Rule 16b-3. It is the intent of· the Company that the Plan comply in all respects with applicable provisions of Rule 16b-3 under the Securities Exchange Act of 1934. Accordingly, if any provision of the Plan does not comply with the requirements of said Rule 16b-3 as then applicable to any such Eligible Director, or would cause any Eligible

Director to no longer be deemed a "***disinterested person***" within the meaning of said Rule 16b-3, such provision shall be construed or deemed amended to the extent necessary to conform to such requirements with respect to such Eligible Director. In addition, the Board shall have no authority to make any amendment, alteration, suspension, discontinuation or termination of the Plan or take other action if and to the extent such authority would cause an Eligible Director's transactions under the Plan not to be exempt or any Eligible Director no longer to be deemed a "disinterested person," under said Rule 16b-3.

Section 6.6. Governing Law. This Plan shall be governed by and construed in accordance with the laws of the State of Illinois.

Section 6.7. Successors. The provisions of this Plan shall bind and inure to the benefit of the Company and its successors and assigns.

Section 6.8. Effective Date of Plan. The Plan was originally approved by the stockholders of the Company effective as of March 17, 1995. The effectiveness of this amendment and restatement shall not be contingent on approval by the stockholders of the Company.

Section 6.9. No Right to Continued Service. Nothing contained herein shall be construed to confer upon any Eligible Director the right to continue to serve on the Board or in any other capacity.

Section 6.10. Compliance with Section 409A. Notwithstanding anything to the contrary contained in the Plan:

(i) Distributions. No distributions shall be permitted or made under the Plan which would cause the Plan not to meet, or to be deemed to be operated not in accordance with, the requirements of Section 409A(a)(2) of the Code.

(ii) Acceleration of Benefits. The acceleration of the time or schedule of any payment or distribution under the Plan which would cause the Plan not to meet, or be deemed to be operated not in accordance with, the requirements of Section 409A(a)(2) of the Code is prohibited, except as provided in regulations promulgated from time to time by the Secretary of the Treasury.

(iii) Elections. No elections shall be permitted or made under the Plan which will cause the Plan to fail to meet, or be deemed to be operated not in accordance with, the requirements of Section 409A(a)(4) of the Code;

provided, however, that the provisions of this Section 6.10 shall not apply to amounts deferred before January 1, 2005, except to the extent necessary to prevent the Plan from (i) failing to meet the requirements of Section 409A(a)(2), (3) and (4) of the Code or (ii) not being operated in accordance with such requirements.

EXHIBIT 31.1

SECTION 302 CERTIFICATION

I, David W. Heinzmann, certify that:

1 I have reviewed this Quarterly Report on Form 10-Q of Littelfuse Inc.;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4 The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5 The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: October 28, 2020

/s/ David W. Heinzmann

David W. Heinzmann
President and Chief Executive Officer

EXHIBIT 31.2

SECTION 302 CERTIFICATION

I, Meenal A. Sethna, certify that:

1 I have reviewed this Quarterly Report on Form 10-Q of Littelfuse Inc.;

2 Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4 The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5 The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: October 28, 2020

/s/ Meenal A. Sethna

Meenal A. Sethna
Executive Vice President and Chief Financial Officer

EXHIBIT 32.1

LITTELFUSE, INC.

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of title 18, United States Code), each of the undersigned officers of Littelfuse, Inc. (“the Company”) does hereby certify that to his knowledge:

The Quarterly Report of the Company on Form 10-Q for the fiscal quarter ended September 26, 2020 (“the Report”) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ David W. Heinzmann	/s/ Meenal A. Sethna
David W. Heinzmann	Meenal A. Sethna
President and Chief Executive Officer	Executive Vice President and Chief Financial Officer
Dated: October 28, 2020	Dated: October 28, 2020