

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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 27, 2019

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: 001-37961

ICHOR HOLDINGS, LTD.

(Exact Name of Registrant as Specified in its Charter)

Cayman Islands
(State or other jurisdiction of
incorporation or organization)
3185 Laurelview Ct.
Fremont, CA
(Address of principal executive offices)

Not Applicable
(I.R.S. Employer
Identification No.)

94538
(Zip Code)

Registrant's telephone number, including area code: (510) 897-5200

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes 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.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Small reporting company

Emerging Growth Company

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

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary Shares, par value \$0.0001	ICHR	The NASDAQ Stock Market LLC

As of November 1, 2019, the registrant had 22,494,763 ordinary shares, \$0.0001 par value per share, outstanding.

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PART I

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

ICHOR HOLDINGS, LTD.
Consolidated Balance Sheets
(dollars in thousands, except per share amounts)

	September 27, 2019	December 28, 2018
Assets		
Current assets:		
Cash	\$ 30,175	\$ 43,834
Accounts receivable, net	77,140	40,287
Inventories, net	105,822	121,106
Prepaid expenses and other current assets	5,085	6,348
Total current assets	218,222	211,575
Property and equipment, net	43,056	41,740
Operating lease right-of-use assets	14,913	—
Other noncurrent assets	935	906
Deferred tax assets, net	1,363	1,363
Intangible assets, net	55,367	56,895
Goodwill	173,010	173,010
Total assets	<u>\$ 506,866</u>	<u>\$ 485,489</u>
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 86,963	\$ 64,300
Accrued liabilities	10,123	9,556
Other current liabilities	3,875	5,148
Current portion of long-term debt	8,750	8,750
Current portion of lease liabilities	5,291	—
Total current liabilities	115,002	87,754
Long-term debt, less current portion, net	169,250	192,117
Lease liabilities, less current portion	10,020	—
Deferred tax liabilities	3,097	3,966
Other non-current liabilities	2,307	3,326
Total liabilities	299,676	287,163
Shareholders' equity:		
Preferred shares (\$0.0001 par value; 20,000,000 shares authorized; zero shares issued and outstanding)	—	—
Ordinary shares (\$0.0001 par value; 200,000,000 shares authorized; 22,482,403 and 22,234,508 shares outstanding, respectively; 26,919,842 and 26,574,037 shares issued, respectively)	2	2
Additional paid in capital	236,044	228,358
Treasury shares at cost (4,437,439 and 4,339,529 shares, respectively)	(91,578)	(89,979)
Retained earnings	62,722	59,945
Total shareholders' equity	207,190	198,326
Total liabilities and shareholders' equity	<u>\$ 506,866</u>	<u>\$ 485,489</u>

See accompanying notes.

ICHOR HOLDINGS, LTD.
Consolidated Statements of Operations
(dollars in thousands, except per share amounts)

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
Net sales	\$ 154,456	\$ 175,207	\$ 431,482	\$ 682,209
Cost of sales	133,763	146,993	371,033	567,521
Gross profit	20,693	28,214	60,449	114,688
Operating expenses:				
Research and development	2,987	2,123	8,012	7,152
Selling, general, and administrative	11,048	10,658	33,491	38,016
Amortization of intangible assets	3,336	3,885	9,675	11,536
Total operating expenses	17,371	16,666	51,178	56,704
Operating income	3,322	11,548	9,271	57,984
Interest expense	2,663	2,553	8,193	7,360
Other income, net	(43)	(84)	(12)	(60)
Income before income taxes	702	9,079	1,090	50,684
Income tax benefit	(221)	(558)	(1,687)	(3,714)
Net income	\$ 923	\$ 9,637	\$ 2,777	\$ 54,398
Net income per share:				
Basic	\$ 0.04	\$ 0.40	\$ 0.12	\$ 2.15
Diluted	\$ 0.04	\$ 0.39	\$ 0.12	\$ 2.11
Shares used to compute net income per share:				
Basic	22,454,408	24,352,995	22,373,181	25,352,489
Diluted	22,718,882	24,674,912	22,629,855	25,840,494

See accompanying notes.

ICHOR HOLDINGS, LTD.
Consolidated Statements of Shareholders' Equity
(dollars in thousands)

For the three months ending September 27, 2019	Ordinary Shares		Additional Paid-In Capital	Treasury Shares		Retained Earnings	Total Shareholders' Equity
	Shares	Amount		Shares	Amount		
Balance at June 28, 2019	22,414,089	\$ 2	\$ 233,508	4,437,439	\$ (91,578)	\$ 61,799	\$ 203,731
Ordinary shares issued from exercise of stock options	33,421	—	433	—	—	—	433
Ordinary shares issued from vesting of restricted share units	9,749	—	(48)	—	—	—	(48)
Ordinary shares issued from employee share purchase plan	25,144	—	359	—	—	—	359
Repurchase of ordinary shares	—	—	—	—	—	—	—
Share-based compensation expense	—	—	1,792	—	—	—	1,792
Net income	—	—	—	—	—	923	923
Balance at September 27, 2019	<u>22,482,403</u>	<u>\$ 2</u>	<u>\$ 236,044</u>	<u>4,437,439</u>	<u>\$ (91,578)</u>	<u>\$ 62,722</u>	<u>\$ 207,190</u>

For the nine months ending September 27, 2019	Ordinary Shares		Additional Paid-In Capital	Treasury Shares		Retained Earnings	Total Shareholders' Equity
	Shares	Amount		Shares	Amount		
Balance at December 28, 2018	22,234,508	\$ 2	\$ 228,358	4,339,529	\$ (89,979)	\$ 59,945	\$ 198,326
Ordinary shares issued from exercise of stock options	238,121	—	2,640	—	—	—	2,640
Ordinary shares issued from vesting of restricted share units	60,039	—	(222)	—	—	—	(222)
Ordinary shares issued from employee share purchase plan	47,645	—	671	—	—	—	671
Repurchase of ordinary shares	(97,910)	—	—	97,910	(1,599)	—	(1,599)
Share-based compensation expense	—	—	4,597	—	—	—	4,597
Net income	—	—	—	—	—	2,777	2,777
Balance at September 27, 2019	<u>22,482,403</u>	<u>\$ 2</u>	<u>\$ 236,044</u>	<u>4,437,439</u>	<u>\$ (91,578)</u>	<u>\$ 62,722</u>	<u>\$ 207,190</u>

See accompanying notes.

ICHOR HOLDINGS, LTD.
Consolidated Statements of Shareholders' Equity (continued)
(dollars in thousands)

For the three months ending September 28, 2018	Ordinary Shares		Additional Paid-In Capital	Treasury Shares		Retained Earnings	Total Shareholders' Equity
	Shares	Amount		Shares	Amount		
Balance at June 29, 2018	25,268,836	\$ 3	\$ 225,363	1,257,605	\$ (29,970)	\$ 46,823	\$ 242,219
Ordinary shares issued from exercise of stock options	10,930	—	151	—	—	—	151
Ordinary shares issued from vesting of restricted share units	7,246	—	(43)	—	—	—	(43)
Ordinary shares issued from employee share purchase plan	18,596	—	337	—	—	—	337
Repurchase of ordinary shares	(1,424,359)	(1)	—	1,424,359	(30,347)	—	(30,348)
Share-based compensation expense	—	—	1,271	—	—	—	1,271
Net income	—	—	—	—	—	9,637	9,637
Balance at September 28, 2018	<u>23,881,249</u>	<u>\$ 2</u>	<u>\$ 227,079</u>	<u>2,681,964</u>	<u>\$ (60,317)</u>	<u>\$ 56,460</u>	<u>\$ 223,224</u>

For the nine months ending September 28, 2018	Ordinary Shares		Additional Paid-In Capital	Treasury Shares		Retained Earnings	Total Shareholders' Equity
	Shares	Amount		Shares	Amount		
Balance at December 29, 2017	25,892,162	\$ 3	\$ 214,697	—	\$ —	\$ 2,062	\$ 216,762
Ordinary shares issued from exercise of stock options	573,162	—	5,661	—	—	—	5,661
Ordinary shares issued from vesting of restricted share units	68,512	—	(70)	—	—	—	(70)
Ordinary shares issued from employee share purchase plan	29,377	—	514	—	—	—	514
Repurchase of ordinary shares	(2,681,964)	(1)	—	2,681,964	(60,317)	—	(60,318)
Share-based compensation expense	—	—	6,277	—	—	—	6,277
Net income	—	—	—	—	—	54,398	54,398
Balance at September 28, 2018	<u>23,881,249</u>	<u>\$ 2</u>	<u>\$ 227,079</u>	<u>2,681,964</u>	<u>\$ (60,317)</u>	<u>\$ 56,460</u>	<u>\$ 223,224</u>

See accompanying notes.

ICHOR HOLDINGS, LTD.
Consolidated Statements of Cash Flows
(in thousands)

	Nine Months Ended	
	September 27, 2019	September 28, 2018
Cash flows from operating activities:		
Net income	\$ 2,777	\$ 54,398
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	15,957	17,405
Share-based compensation	4,597	6,277
Deferred income taxes	(869)	(6,246)
Amortization of debt issuance costs	696	731
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable, net	(36,853)	(14,646)
Inventories, net	15,284	22,569
Prepaid expenses and other assets	3,492	1,336
Accounts payable	23,413	(48,104)
Accrued liabilities	661	(3,711)
Other liabilities	(4,152)	(2,639)
Net cash provided by operating activities	<u>25,003</u>	<u>27,370</u>
Cash flows from investing activities:		
Capital expenditures	(8,348)	(11,385)
Cash paid for acquisitions, net of cash acquired	—	(1,443)
Cash paid for intangible assets	(8,147)	—
Net cash used in investing activities	<u>(16,495)</u>	<u>(12,828)</u>
Cash flows from financing activities:		
Issuance of ordinary shares under share-based compensation plans	3,217	6,215
Employees' taxes paid upon vesting of restricted share units	(222)	(70)
Repurchase of ordinary shares	(1,599)	(60,318)
Debt issuance and modification costs	—	(2,092)
Borrowings on revolving credit facility	5,000	17,162
Repayments on revolving credit facility	(22,000)	(5,000)
Repayments on term loan	(6,563)	(6,722)
Net cash used in financing activities	<u>(22,167)</u>	<u>(50,825)</u>
Net decrease in cash	(13,659)	(36,283)
Cash at beginning of year	43,834	69,304
Cash at end of quarter	<u>\$ 30,175</u>	<u>\$ 33,021</u>
Supplemental disclosures of cash flow information:		
Cash paid during the period for interest	\$ 6,115	\$ 5,987
Cash paid during the period for taxes	\$ 1,961	\$ 2,166
Supplemental disclosures of non-cash activities:		
Capital expenditures included in accounts payable	\$ 712	\$ 790

See accompanying notes.

ICHOR HOLDINGS, LTD.
Notes to Consolidated Financial Statements (Unaudited)
(dollar figures in tables in thousands, except per share amounts)

Note 1 – Basis of Presentation and Selected Significant Accounting Policies

Basis of Presentation

These consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the U.S. (“GAAP”). All intercompany balances and transactions have been eliminated upon consolidation. All dollar figures presented in tables in the notes to consolidated financial statements are in thousands, except per share amounts.

Year End

We use a 52 or 53 week fiscal year ending on the last Friday in December. The three months ended September 27, 2019 and September 28, 2018 were both 13 weeks. References to the third quarter of 2019 and 2018 refer to the three month periods then ended. References to fiscal year 2019 refer to our fiscal year ending December 27, 2019.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods presented. We base our estimates and judgments on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual results could differ from the estimates made by management. Significant estimates include the fair value of assets and liabilities acquired in acquisitions, estimated useful lives for long-lived assets, allowance for doubtful accounts, inventory valuation, uncertain tax positions, fair value assigned to stock options granted, and impairment analysis for both definite-lived intangible assets and goodwill.

Revenue Recognition

We recognize revenue when control of promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. This amount is recorded as net sales in our consolidated statements of operations.

Transaction price – In most of our contracts, prices are generally determined by a customer-issued purchase order and generally remain fixed over the duration of the contract. Certain contracts contain variable consideration, including early-payment discounts and rebates. When a contract includes variable consideration, we evaluate the estimate of the variable consideration to determine whether the estimate needs to be constrained; therefore, we include the variable consideration in the transaction price only to the extent that it is probable that a significant reversal will not occur. Variable consideration estimates are updated at each reporting date. Historically, we have not incurred significant costs to obtain a contract. All amounts billed to a customer relating to shipping and handling are classified as net sales, while all costs incurred by us for shipping and handling are classified as cost of sales.

Performance obligations – Substantially all of our performance obligations pertain to promised goods (“products”), which are primarily comprised of fluid delivery subsystems, weldments, and other components. Most of our contracts contain a single performance obligation and are generally completed within twelve months. Product sales are recognized at a point-in-time, generally upon delivery, as such term is defined within the contract, as that is when control of the promised good has transferred. Products are covered by a standard assurance warranty, generally extended for a period of one to two years depending on the customer, which promises that delivered products conform to contract specifications. As such, we account for such warranties under ASC 460, *Guarantees*, and not as a separate performance obligation.

Contract balances – Accounts receivable represents our unconditional right to receive consideration from our customers. Accounts receivable are carried at invoice price less an estimate for doubtful accounts and estimated payment discounts. Payment terms vary by customer but are generally due within 15-60 days. Historically, we have not incurred significant payment issues with our customers. We had no significant contract assets or liabilities on our consolidated balance sheets in any of the periods presented.

Commitments and Contingencies

We are periodically involved in legal actions and claims that arise as a result of events that occur in the normal course of operations. The ultimate resolution of these actions is not expected to have a material adverse effect on our financial position or results of operations.

Accounting Pronouncements Recently Adopted

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which consists of a comprehensive lease accounting standard. Under the new standard, assets and liabilities arising from most leases will be recognized on the balance sheet. Leases will be classified as either operating or financing, and the lease classification will determine whether expense is recognized on a straight-line basis (operating leases) or based on an effective interest method (financing leases). The standard also contains expanded disclosure requirements regarding the amounts, timing, and uncertainties of cash flows related to leasing activities.

The new standard is effective for interim and annual periods beginning after December 15, 2018. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides an optional transition method allowing entities to initially apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. We adopted and applied the lease standard as of December 29, 2018, the first day of fiscal year 2019, using this optional transition method.

The new standard provides a number of practical expedients in transition. We elected the package of practical expedients, which permits us not to reassess our prior conclusions about lease identification, lease classification, and initial direct costs. We elected to not recognize short-term leases, those with an initial term of 12 months or less, on our consolidated balance sheets.

The new standard had material effects on our consolidated financial statements. The most significant effects relate to the recognition of right-of-use (“ROU”) assets and lease liabilities on our balance sheet for our facilities operating leases and the new disclosure requirements about our leasing activities. Upon adoption, we recorded operating lease liabilities of \$18.1 million, with an offsetting increase to operating lease ROU assets of \$17.7 million in exchange for the liabilities assumed. We did not recognize a cumulative-effect adjustment to the opening balance of retained earnings, as there was no adjustment to be made as a result of our adoption and application of the standard. The standard did not have a significant impact on our consolidated statements of operations or cash flows.

In June 2018, the FASB issued ASU 2018-07, *Compensation-Stock Compensation (Topic 718): Improvements to Non-Employee Share-Based Payment Accounting*. This standard is intended to reduce cost and complexity and to improve financial reporting for share-based payments issued to nonemployees. ASU 2018-07 expands the scope of ASC Topic 718, which currently only includes share-based payments issued to employees, to also include share-based payments issued to nonemployees for goods and services. We adopted ASU 2018-07 on December 29, 2018, the first day of fiscal year 2019, which did not have a significant impact on our consolidated financial statements.

Note 2 – Inventories

Inventories consist of the following:

	September 27, 2019	December 28, 2018
Raw materials	\$ 71,218	\$ 90,713
Work in process	25,534	20,852
Finished goods	16,996	17,233
Excess and obsolete adjustment	(7,926)	(7,692)
Total inventories, net	<u>\$ 105,822</u>	<u>\$ 121,106</u>

Note 3 – Property and Equipment

Property and equipment consist of the following:

	September 27, 2019	December 28, 2018
Machinery	\$ 30,729	\$ 29,885
Leasehold improvements	23,044	15,333
Computer software, hardware, and equipment	5,370	4,884
Office furniture, fixtures and equipment	1,121	1,058
Vehicles	26	26
Construction-in-process	8,087	9,514
	<u>68,377</u>	<u>60,700</u>
Less accumulated depreciation	(25,321)	(18,960)
Total property and equipment, net	<u>\$ 43,056</u>	<u>\$ 41,740</u>

Depreciation expense was \$2.2 million and \$2.0 million for the third quarter of 2019 and 2018, respectively, and \$6.3 million and \$5.9 million for the nine months ended September 27, 2019 and September 28, 2018, respectively.

Note 4 – Intangible Assets

Definite-lived intangible assets consist of the following:

	September 27, 2019				Weighted average useful life
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	
Trademarks	\$ 9,690	\$ (7,508)	\$ —	\$ 2,182	10.0 years
Customer relationships	82,986	(39,791)	—	43,195	7.8 years
Developed technology	11,047	(1,057)	—	9,990	10.0 years
Total intangible assets	<u>\$ 103,723</u>	<u>\$ (48,356)</u>	<u>\$ —</u>	<u>\$ 55,367</u>	

	December 28, 2018				Weighted average useful life
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	
Trademarks	\$ 9,690	\$ (6,781)	\$ —	\$ 2,909	10.0 years
Customer relationships	82,986	(31,308)	—	51,678	7.8 years
Developed technology	2,900	(592)	—	2,308	10.0 years
Total intangible assets	<u>\$ 95,576</u>	<u>\$ (38,681)</u>	<u>\$ —</u>	<u>\$ 56,895</u>	

During the second quarter of 2019, we acquired certain developed technology assets for \$8.1 million, which have a weighted average useful life of 10 years.

Note 5 – Leases

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. For purposes of calculating operating lease liabilities, we use the non-cancellable lease term, without consideration for renewal options. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments.

We lease facilities under various non-cancellable operating leases expiring through 2024. In addition to base rental payments, we are generally responsible for our proportionate share of operating expenses, including facility maintenance, insurance, and property taxes. As these amounts are variable, they are not included in lease liabilities. As of September 27, 2019, we had no operating leases executed for which the rental period had not yet commenced.

The components of lease expense are as follows:

	Three Months Ended September 27, 2019	Nine Months Ended September 27, 2019
Operating lease cost	\$ 1,722	\$ 5,015

Supplemental cash flow information related to leases is as follows:

	Nine Months Ended September 27, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 3,807
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 566
Weighted-average remaining lease term of operating leases	3.3 years
Weighted-average discount rate of operating leases	4.5%

Future minimum lease payments under non-cancelable leases as of September 27, 2019 are as follows:

2019, remaining	\$ 1,365
2020	5,271
2021	4,754
2022	4,062
2023	1,096
Thereafter	118
Total future minimum lease payments	16,666
Less imputed interest	(1,355)
Total lease liabilities	<u>\$ 15,311</u>

Future minimum lease payments under non-cancelable leases as of December 28, 2018, as reported under previous guidance, are as follows:

2019	\$ 4,910
2020	4,873
2021	4,356
2022	3,820
2023	1,103
Thereafter	120
Total future minimum lease payments	<u>19,182</u>

Note 6 – Income Taxes

Income tax information for the periods reported are as follows:

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
Income tax benefit	\$ (221)	\$ (558)	\$ (1,687)	\$ (3,714)
Income before income taxes	\$ 702	\$ 9,079	\$ 1,090	\$ 50,684
Effective income tax rate	-31.5%	-6.1%	-154.8%	-7.3%

Our effective tax rate for the third quarter of 2019 differs from the statutory rate due to taxes on foreign income that differ from the U.S. tax rate and return-to-provision adjustments related to recently filed tax returns. Our effective tax rate for the nine months ended September 27, 2019 differs from the statutory rate due to taxes on foreign income that differ from the U.S. tax rate, the release of certain tax reserves related to statute of limitation expirations and settlements, and excess tax benefits from share-based compensation.

Our effective tax rate for the three and nine months ended September 28, 2018 differs from the statutory rate due to taxes on foreign income that differ from the U.S. tax rate, accrued withholding taxes, excess tax benefits from share-based compensation, and the release of a valuation allowance against our foreign tax credit carryforwards.

The ending balance for the unrecognized tax benefits for uncertain tax positions was approximately \$1.9 million at September 27, 2019. The related interest and penalties were zero and \$0.4 million, respectively. The uncertain tax positions that are reasonably possible to decrease in the next twelve months are insignificant.

As of September 27, 2019, we were not under examination by tax authorities.

Note 7 – Employee Benefit Programs

401(k) Plan

We sponsor a 401(k) plan available to employees of our U.S.-based subsidiaries. Participants may make salary deferral contributions not to exceed 50% of a participant's annual compensation or the maximum amount otherwise allowed by law. Eligible employees receive a discretionary matching contribution equal to 50% of a participant's deferral, up to an annual maximum of 4% of a participant's annual compensation. Matching contributions were \$0.4 million and \$0.3 million for the third quarter of 2019 and 2018, respectively, and \$1.1 million and \$1.1 million for the nine months ended September 27, 2019 and September 28, 2018, respectively.

Note 8 – Long-Term Debt

Long-term debt consists of the following:

	September 27, 2019	December 28, 2018
Term loan	\$ 164,062	\$ 170,625
Revolving credit facility	17,162	34,162
Total principal amount of long-term debt	181,224	204,787
Less unamortized debt issuance costs	(3,224)	(3,920)
Total long-term debt, net	178,000	200,867
Less current portion	(8,750)	(8,750)
Total long-term debt, less current portion, net	<u>\$ 169,250</u>	<u>\$ 192,117</u>

On February 15, 2018, we amended and restated our credit agreement, which replaced our existing credit facilities with a \$175.0 million term loan and a \$125.0 million revolving credit facility. The amendment reduced our borrowing rate, depending on our leverage ratio, and extended the maturity date. We incurred debt issuance costs of \$2.1 million in connection with the amendment. The amendment did not meet the definition of an extinguishment and was accounted for as a debt modification.

Interest is charged at either the Base Rate or the Eurodollar rate (as such terms are defined in the credit agreement) at our option, plus an applicable margin. The Base Rate is equal to the higher of i) the Prime Rate, ii) the Federal Funds Rate plus 0.5%, or iii) the Eurodollar Rate plus 1.00%. The Eurodollar rate is equal to LIBOR. The applicable margin on Base Rate and Eurodollar Rate loans is 0.75-1.50% and 1.75-2.50% per annum, respectively, depending on our leverage ratio. We are also charged a commitment fee of 0.20%-0.35% on the unused portion of our revolving credit facility. Base Rate interest payments and commitment fees are due quarterly. Eurodollar interest payments are due on the last day of the applicable interest period. At September 27, 2019, the term loan and revolving credit facility bore interest at the Eurodollar rate option of 4.83% and 4.66%, respectively.

Term loan principal payments of \$2.2 million are due on a quarterly basis. The term loan and revolving credit facility mature on February 15, 2023.

Note 9 – Shareholders' Equity

Share Repurchase Program

In February 2018, our board of directors authorized a share repurchase program up to \$50.0 million under which we may repurchase our ordinary shares in the open market or through privately negotiated transactions, depending on market conditions and other factors. Ordinary shares repurchased are recorded as treasury shares using the cost method on a first-in, first-out basis. In August 2018, our board of directors authorized a \$50.0 million increase to the share repurchase program.

During the nine months ended September 27, 2019, we repurchased 97,910 ordinary shares for a total cost of \$1.6 million at an average price of \$16.34 per share. At September 27, 2019, \$8.4 million remained available to repurchase ordinary shares under the repurchase program.

Note 10 – Share-Based Compensation

The 2016 Omnibus Incentive Plan (the “2016 Plan”) provides for grants of share-based awards to employees, directors, and consultants. Awards may be in the form of stock options (“Options”), tandem and non-tandem stock appreciation rights, restricted share awards or restricted share units (“RSUs”), performance awards, and other share-based awards. Awards generally vest over four years, 25% on the first anniversary and quarterly thereafter. Upon vesting of RSUs, employees may elect to have shares withheld to cover statutory minimum withholding taxes. Shares withheld are not reflected as an issuance of ordinary shares within our consolidated statements of shareholders' equity, as the shares were never issued, and the associated tax payments are reflected as financing activities within our consolidated statements of cash flows.

Share-based compensation expense across all plans for Options, RSUs, and employee share purchase rights was \$1.8 million and \$1.3 million for the third quarter of 2019 and 2018, respectively, and \$4.6 million and \$6.3 million for the nine months ended September 27, 2019 and September 28, 2018, respectively.

Stock Options

The following table summarizes Option activity:

	Number of Stock Options		Weighted average exercise price per share	Weighted average remaining contractual term	Aggregate intrinsic value (in thousands)
	Time vesting	Performance vesting			
Outstanding, December 28, 2018	1,706,441	65,908	\$ 18.57		
Granted	500,127	—	\$ 22.47		
Exercised	(238,121)	—	\$ 11.09		
Forfeited	(118,835)	—	\$ 22.10		
Expired	(65,596)	—	\$ 16.84		
Outstanding, September 27, 2019	1,784,016	65,908	\$ 20.42	5.0 years	\$ 7,666
Exercisable, September 27, 2019	662,819	65,908	\$ 17.18	3.7 years	\$ 5,376

Restricted Share Units

The following table summarizes RSU activity:

	Number of Restricted Share Units		Weighted average grant date fair value per share
	Time vesting	Performance vesting	
Unvested, December 28, 2018	192,300	—	\$ 22.64
Granted	266,237	17,730	\$ 22.37
Vested	(70,309)	—	\$ 23.09
Forfeited	(6,875)	—	\$ 25.41
Unvested, September 27, 2019	381,353	17,730	\$ 22.32

During the second quarter of 2019, an executive was granted 17,730 performance-vesting RSUs (“PRSUs”) that cliff-vest upon the satisfaction of certain financial metrics for fiscal year 2020. The PRSUs expire if the financial metrics are not met.

Employee Share Purchase Plan

The 2017 Employee Stock Purchase Plan (the “2017 ESPP”) grants employees the ability to designate a portion of their base-pay to purchase ordinary shares at a price equal to 85% of the fair market value of our ordinary shares on the first or last day of each 6 month purchase period. Purchase periods begin on January 1 or July 1 and end on June 30 or December 31, or the next business day if such date is not a business day. Shares are purchased on the last day of the purchase period.

During the nine months ended September 27, 2019, 47,645 ordinary shares were purchased by eligible employees under the 2017 ESPP. As of September 27, 2019, approximately 2.4 million ordinary shares remain available for purchase under the 2017 ESPP.

Note 11 – Segment Information

Our Chief Operating Decision Maker, the Chief Executive Officer, reviews our results of operations on a consolidated level and executive staff is structured by function rather than by product category. Therefore, we operate in one operating segment. Key resources, decisions, and assessment of performance are also analyzed on a company-wide level.

Foreign operations are conducted primarily through our wholly owned subsidiaries in Singapore and Malaysia. Our principal markets include North America, Asia and, to a lesser degree, Europe. Sales by geographic area represent sales to unaffiliated customers.

All information on sales by geographic area is based upon the location to which the products were shipped. The following table sets forth sales by geographic area:

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
United States of America	\$ 77,997	\$ 103,563	\$ 231,529	\$ 417,207
Singapore	53,806	45,626	134,083	190,843
Europe	13,225	17,692	38,115	46,565
Other	9,428	8,326	27,755	27,594
Total net sales	<u>\$ 154,456</u>	<u>\$ 175,207</u>	<u>\$ 431,482</u>	<u>\$ 682,209</u>

Note 12 – Earnings per Share

The following table sets forth the computation of basic and diluted earnings per share and a reconciliation of the numerator and denominator used in the calculation:

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
Numerator:				
Net income	\$ 923	\$ 9,637	\$ 2,777	\$ 54,398
Denominator:				
Basic weighted average ordinary shares outstanding	22,454,408	24,352,995	22,373,181	25,352,489
Dilutive effect of Options	222,470	302,468	237,908	459,921
Dilutive effect of RSUs	40,423	18,112	18,239	27,638
Dilutive effect of ESPP	1,581	1,337	527	446
Diluted weighted average ordinary shares outstanding	<u>22,718,882</u>	<u>24,674,912</u>	<u>22,629,855</u>	<u>25,840,494</u>
Earnings per share:				
Basic	\$ 0.04	\$ 0.40	\$ 0.12	\$ 2.15
Diluted	\$ 0.04	\$ 0.39	\$ 0.12	\$ 2.11

A combined total of 1,480,627, 1,303,905, 1,622,252 and 1,218,053 potentially dilutive Options and RSUs were excluded from the calculation of net income per share for the third quarter of 2019, third quarter of 2018, nine months ended September 27, 2019, and September 28, 2018, respectively, because including them would have been antidilutive under the treasury stock method.

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and related notes included elsewhere in this report. The following discussion contains forward-looking statements based upon our current plans, expectations, and beliefs that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, particularly in "Risk Factors."

Overview

We are a leader in the design, engineering and manufacturing of critical fluid delivery subsystems for semiconductor capital equipment. Our primary offerings include gas and chemical delivery subsystems, collectively known as fluid delivery subsystems, which are key elements of the process tools used in the manufacturing of semiconductor devices. Our gas delivery subsystems deliver, monitor and control precise quantities of the specialized gases used in semiconductor manufacturing processes such as etch and deposition. Our chemical delivery subsystems precisely blend and dispense the reactive liquid chemistries used in semiconductor manufacturing processes such as electroplating and cleaning. We also manufacture certain components such as weldments and precision machined components for use in fluid delivery systems for direct sales to our customers. This vertically integrated portion of our business is primarily focused on metal and plastic parts that are used in gas and chemical systems, respectively.

Fluid delivery subsystems ensure accurate measurement and uniform delivery of specialty gases and chemicals at critical steps in the semiconductor manufacturing process. Any malfunction or material degradation in fluid delivery reduces yields and increases the likelihood of manufacturing defects in these processes. Historically, semiconductor OEMs internally designed and manufactured the fluid delivery subsystems used in their process tools. Currently, most OEMs outsource the design, engineering, and manufacturing of their gas delivery subsystems to a few specialized suppliers, including us. Additionally, many OEMs are also increasingly outsourcing the design, engineering, and manufacturing of their chemical delivery subsystems due to the increased fluid expertise required to manufacture these subsystems. Outsourcing these subsystems has allowed OEMs to leverage the suppliers' highly specialized engineering, design, and production skills while focusing their internal resources on their own value-added processes. We believe that this outsourcing trend has enabled OEMs to reduce their fixed costs and development time, as well as provided significant growth opportunities for specialized subsystems suppliers like us.

We have a global footprint with production facilities in Malaysia, Singapore, Korea, California, Florida, Minnesota, Oregon, and Texas. Our two largest customers by revenue were Lam Research and Applied Materials for all periods presented.

The following summarizes key financial information for the periods indicated:

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
	<i>(dollars in thousands)</i>			
Net sales	\$ 154,456	\$ 175,207	\$ 431,482	\$ 682,209
Gross profit	\$ 20,693	\$ 28,214	\$ 60,449	\$ 114,688
Gross margin	13.4%	16.1%	14.0%	16.8%
Operating expenses	\$ 17,371	\$ 16,666	\$ 51,178	\$ 56,704
Operating income	\$ 3,322	\$ 11,548	\$ 9,271	\$ 57,984
GAAP net income	\$ 923	\$ 9,637	\$ 2,777	\$ 54,398
Non-GAAP adjusted net income	\$ 6,748	\$ 13,601	\$ 17,417	\$ 67,772

Results of Operations

The following table sets forth our unaudited results of operations for the periods presented. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
<i>(in thousands)</i>				
Consolidated Statements of Operations Data:				
Net sales	\$ 154,456	\$ 175,207	\$ 431,482	\$ 682,209
Cost of sales	133,763	146,993	371,033	567,521
Gross profit	20,693	28,214	60,449	114,688
Operating expenses:				
Research and development	2,987	2,123	8,012	7,152
Selling, general, and administrative	11,048	10,658	33,491	38,016
Amortization of intangible assets	3,336	3,885	9,675	11,536
Total operating expenses	17,371	16,666	51,178	56,704
Operating income	3,322	11,548	9,271	57,984
Interest expense	2,663	2,553	8,193	7,360
Other income, net	(43)	(84)	(12)	(60)
Income before income taxes	702	9,079	1,090	50,684
Income tax benefit	(221)	(558)	(1,687)	(3,714)
Net income	923	9,637	2,777	54,398

The following table sets forth our unaudited results of operations as a percentage of our total sales for the periods presented.

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
Consolidated Statements of Operations Data:				
Net sales	100.0	100.0	100.0	100.0
Cost of sales	86.6	83.9	86.0	83.2
Gross profit	13.4	16.1	14.0	16.8
Operating expenses:				
Research and development	1.9	1.2	1.9	1.0
Selling, general, and administrative	7.2	6.1	7.8	5.6
Amortization of intangible assets	2.2	2.2	2.2	1.7
Total operating expenses	11.2	9.5	11.9	8.3
Operating income	2.2	6.6	2.1	8.5
Interest expense	1.7	1.5	1.9	1.1
Other income, net	0.0	0.0	0.0	0.0
Income before income taxes	0.5	5.2	0.3	7.4
Income tax benefit	(0.1)	(0.3)	(0.4)	(0.5)
Net income	0.6	5.5	0.6	8.0

Comparison of the Three and Nine Months Ended September 27, 2019 and September 28, 2018

Net Sales

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
	<i>(dollars in thousands)</i>							
Net sales	\$ 154,456	\$ 175,207	\$ (20,751)	-11.8%	\$ 431,482	\$ 682,209	\$ (250,727)	-36.8%

The decrease in net sales from the three and nine months ended September 28, 2018 to the three and nine months ended September 27, 2019 was primarily due to reduced demand from our customers as a result of a cyclical downturn in the global wafer fabrication equipment market. On a geographic basis, sales in the U.S. decreased by \$25.6 million to \$78.0 million in the third quarter of 2019 and foreign sales increased by \$4.8 million to \$76.5 million. Sales in the U.S. decreased by \$185.7 million to \$231.5 million in the nine months ended September 27, 2019 and foreign sales decreased by \$65.0 million to \$200.0 million.

Cost of Sales and Gross Profit

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
	<i>(dollars in thousands)</i>							
Cost of sales	\$ 133,763	\$ 146,993	\$ (13,230)	-9.0%	\$ 371,033	\$ 567,521	\$ (196,488)	-34.6%
Gross profit	\$ 20,693	\$ 28,214	\$ (7,521)	-26.7%	\$ 60,449	\$ 114,688	\$ (54,239)	-47.3%
Gross margin	13.4%	16.1%		- 270 bps	14.0%	16.8%		- 280 bps

The decrease in cost of sales and gross profit from the three and nine months ended September 28, 2018 to the three and nine months ended September 27, 2019 was primarily due to decreased sales volume.

The decrease in our gross margin from the three and nine months ended September 28, 2018 to the three and nine months ended September 27, 2019 was primarily due to customer and product mix as well as lower factory utilization.

Research and Development

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
	<i>(dollars in thousands)</i>							
Research and development	\$ 2,987	\$ 2,123	\$ 864	40.7%	\$ 8,012	\$ 7,152	\$ 860	12.0%

The increase in research and development expenses from the three and nine months ended September 28, 2018 to the three and nine months ended September 27, 2019 was primarily due to increased engineering expense associated with the purchase of developed technology assets in the second quarter of 2019.

Selling, General, and Administrative

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
	<i>(dollars in thousands)</i>							
Selling, general, and administrative	\$ 11,048	\$ 10,658	\$ 390	3.7%	\$ 33,491	\$ 38,016	\$ (4,525)	-11.9%

The increase in selling, general, and administrative expense from the third quarter of 2018 to the third quarter of 2019 was primarily due to increased share-based compensation expense of \$0.4 million.

The decrease in selling, general, and administrative expense from the nine months ended September 28, 2018 to the nine months ended September 27, 2019 was primarily due to a reduction in executive transition costs of \$3.6 million from the retirement of a former officer in the first quarter of 2018; reduced employee related expenses of \$0.9 million resulting from headcount reductions in the second half of 2018 and the first half of 2019, and reduced legal and consulting expenses of \$0.9 million, partially offset by the one-time release of a tax indemnification asset of \$0.7 million recorded in connection with our acquisition of Cal-Weld and reduced operating supplies expense of \$0.4 million.

Amortization of Intangible Assets

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
<i>(dollars in thousands)</i>								
Amortization of intangibles assets	\$ 3,336	\$ 3,885	\$ (549)	-14.1%	\$ 9,675	\$ 11,536	\$ (1,861)	-16.1%

The decrease in amortization expense from the three and nine months ended September 28, 2018 to the three and nine months ended September 27, 2019 was primarily due to certain intangible assets being fully amortized as of the end of the fourth quarter of 2018, partially offset by incremental amortization expense from purchased developed technology assets during the second quarter of 2019.

Interest Expense

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
<i>(dollars in thousands)</i>								
Interest expense	\$ 2,663	\$ 2,553	\$ 110	4.3%	\$ 8,193	\$ 7,360	\$ 833	11.3%

The increase in interest expense from the third quarter of 2018 to the third quarter of 2019 was primarily due to an increase in our weighted average interest rate, from 4.56% to 4.83%, partially offset by a decrease in our average amount borrowed during the quarter.

The increase in interest expense from the nine months ended September 28, 2018 to the nine months ended September 27, 2019 was primarily due to an increase in our weighted average interest rate, from 4.34% to 4.83%, and an increase in our average amount borrowed during the period.

Other Income, Net

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
<i>(dollars in thousands)</i>								
Other income, net	\$ (43)	\$ (84)	\$ 41	-48.8%	\$ (12)	\$ (60)	\$ 48	-80.0%

The changes in other income, net were primarily due to exchange rate fluctuations on transactions denominated in the local currencies of our foreign operations, principally the Singapore Dollar, Malaysian Ringgit, and British Pound.

Income Tax Benefit

	Three Months Ended		Change		Nine Months Ended		Change	
	September 27, 2019	September 28, 2018	Amount	%	September 27, 2019	September 28, 2018	Amount	%
<i>(dollars in thousands)</i>								
Income tax benefit	\$ (221)	\$ (558)	\$ 337	-60.4%	\$ (1,687)	\$ (3,714)	\$ 2,027	-54.6%

The decrease in the income tax benefit from the third quarter of 2018 to the third quarter of 2019 was primarily due to discrete tax benefits recognized in the third quarter of 2018 compared to discrete tax expenses in the third quarter of 2019 related to the tax return filings, partially offset by an increase in tax benefits recognized in the third quarter of 2019 due to higher projected U.S. losses compared to 2018.

The decrease in the tax benefit from the nine months ended September 28, 2018 to the nine months ended September 27, 2019 was primarily due to discrete tax benefits recognized in the second quarter of 2018 relating to the release of a valuation allowance against foreign tax credit carryforwards that did not repeat in the nine months ended September 27, 2019, partially offset by discrete tax benefits recognized in the first quarter of 2019 from the release of certain tax reserves related to statute of limitations expirations and settlements, as well as an increase in tax benefits recognized in the nine months ended September 27, 2019 due to higher projected U.S. losses compared to 2018.

Non-GAAP Results

Management uses non-GAAP adjusted net income to evaluate our operating and financial results. We believe the presentation of non-GAAP results is useful to investors for analyzing business trends and comparing performance to prior periods, along with enhancing investors' ability to view our results from management's perspective. Non-GAAP adjusted net income is defined as: net income excluding (1) amortization of intangible assets, share-based compensation expense, non-recurring expenses including adjustments to the cost of sales, and the tax adjustments related to those non-GAAP adjustments; and (2) non-recurring discrete tax items including tax impacts from releasing a valuation allowance related to foreign tax credits to the extent they are present in gross profit, operating income, and net income. Non-GAAP adjusted diluted EPS is defined as non-GAAP adjusted net income divided by weighted average diluted ordinary shares outstanding during the period.

The following table presents our unaudited non-GAAP adjusted net income and a reconciliation from net income, the most comparable GAAP measure, for the periods indicated:

	Three Months Ended		Nine Months Ended	
	September 27, 2019	September 28, 2018	September 27, 2019	September 28, 2018
	<i>(dollars in thousands, except per share amounts)</i>			
Non-GAAP Data:				
U.S. GAAP net income	\$ 923	\$ 9,637	\$ 2,777	\$ 54,398
Non-GAAP adjustments:				
Amortization of intangible assets	3,336	3,885	9,675	11,536
Share-based compensation	1,792	1,271	4,597	6,277
Other non-recurring expense, net (1)	476	397	2,323	2,283
Tax adjustments related to non-GAAP adjustments	221	(1,589)	(1,955)	(7,421)
Tax benefit from release of valuation allowance (2)	—	—	—	(4,140)
Fair value adjustment to inventory from acquisitions (3)	—	—	—	4,839
Non-GAAP net income	\$ 6,748	\$ 13,601	\$ 17,417	\$ 67,772
U.S. GAAP diluted EPS	\$ 0.04	\$ 0.39	\$ 0.12	\$ 2.11
Non-GAAP diluted EPS	\$ 0.30	\$ 0.55	\$ 0.77	\$ 2.62
Shares used to compute diluted EPS	22,718,882	24,674,912	22,629,855	25,840,494

- (1) Included in this amount for the third quarter of 2019 are (i) acquisition-related expenses, comprised primarily of expense associated with a two year retention agreement between the Company and key management personnel of IAN, which we acquired in April 2018 and (ii) costs associated with restructuring and transitioning key leadership roles.

Included in this amount for the third quarter of 2018 are acquisition-related expenses, comprised primarily of expense associated with a two year retention agreement between the Company and key management personnel of IAN.

Included in this amount for the nine months ended September 27, 2019 are (i) acquisition-related expenses, comprised primarily of a charge to expense from the extinguishment of an indemnification asset related to our acquisition of Cal-Weld in 2017 and expense associated with a two year retention agreement between the Company and key management personnel of IAN, (ii) costs incurred in connection with reorganizing our key personnel and leadership, and (iii) costs incurred with implementing a new ERP system.

Included in this amount for the nine months ended September 28, 2018 are (i) separation benefits for a former officer that became effective in January 2018 and (ii) acquisition-related expenses.

- (2) Represents the release of a valuation allowance against our foreign tax credit carryforwards we now expect to realize as a result of additional analysis of the Tax Cuts and Jobs Act.
- (3) As part of our purchase price allocation for our acquisition of Talon in December 2017, we recorded acquired-inventory at fair value, resulting in a fair value step-up of \$6.2 million. This amount was subsequently charged to cost of sales as acquired-inventory was sold.

Non-GAAP adjusted net income has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for net income or any of our other operating results reported under GAAP. Other companies may calculate adjusted net income differently or may use other measures to evaluate their performance, both of which could reduce the usefulness of our adjusted net income as a tool for comparison.

Because of these limitations, you should consider non-GAAP adjusted net income alongside other financial performance measures, including net income and other financial results presented in accordance with GAAP. In addition, in evaluating non-GAAP adjusted net income, you should be aware that in the future we will incur expenses such as those that are the subject of adjustments in deriving adjusted net income and you should not infer from our presentation of adjusted net income that our future results will not be affected by these expenses or any unusual or non-recurring items.

Liquidity and Capital Resources

We ended the third quarter with cash of \$30.2 million. The decrease of \$13.7 million from December 28, 2018 was primarily due to net payments on long-term debt of \$23.6 million, capital expenditures of \$8.3 million, cash paid for intangibles assets of \$8.1 million, and share repurchases of \$1.6 million, partially offset by cash generated from operations of \$25.0 million and net proceeds from the issuance of ordinary shares under our share-based compensation plans of \$3.0 million.

We believe that our cash, the amounts available under our revolving credit facility, and our cash flows from operations will be sufficient to meet our anticipated cash needs for at least the next 12 months.

Cash Flow Analysis

	Nine Months Ended	
	September 27, 2019	September 28, 2018
	<i>(in thousands)</i>	
Cash provided by operating activities	\$ 25,003	\$ 27,370
Cash used in investing activities	(16,495)	(12,828)
Cash used in financing activities	(22,167)	(50,825)
Net decrease in cash	<u>\$ (13,659)</u>	<u>\$ (36,283)</u>

Operating Activities

Our cash generated from operations of \$25.0 million during the first three quarters of 2019 consists of net income of \$2.8 million, net non-cash charges of \$20.4 million, and a decrease in our net operating assets and liabilities of \$1.8 million. Non-cash charges primarily consist of depreciation and amortization of \$16.0 million and share-based compensation of \$4.6 million. The decrease in our net operating assets and liabilities was primarily due to an increase in accounts payable of \$23.4 million, a decrease in inventories of \$15.3 million, and a decrease in prepaid expenses and other assets of \$3.5 million, partially offset by an increase in accounts receivable of \$36.9 million and a decrease in accrued and other liabilities of \$3.5 million.

Investing Activities

Our cash used in investing activities during the nine months ended September 27, 2019 of \$16.5 million consisted of capital expenditures of \$8.3 million and acquired developed technology assets of \$8.1 million.

Financing Activities

Our cash used in financing activities during the nine months ended September 27, 2019 of \$22.2 million consisted of net payments on long-term debt of \$23.6 million and share repurchases of \$1.6 million, partially offset by net proceeds from the issuance of ordinary shares under our share-based compensation plans of \$3.0 million.

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our consolidated financial statements are identified and described in our annual consolidated financial statements and the notes included in our Annual Report on Form 10-K for the year ended December 28, 2018 (our “Annual Report”).

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exchange Risk

Currently, substantially all of our sales and arrangements with third-party suppliers provide for pricing and payment in U.S. dollars and, therefore, are not subject to material exchange rate fluctuations. As a result, we do not expect foreign currency exchange rate fluctuations to have a material effect on our results of operations. However, increases in the value of the U.S. dollar relative to other currencies would make our products more expensive relative to competing products priced in such other currencies, which could negatively impact our ability to compete. Conversely, decreases in the value of the U.S. dollar relative to other currencies could result in our foreign suppliers raising their prices in order to continue doing business with us.

While not currently significant, we do have certain operating expenses that are denominated in currencies of the countries in which our operations are located, and may be subject to fluctuations due to foreign currency exchange rates, particularly the Singapore dollar, Malaysian ringgit, pound sterling, and euro. Fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our statements of operations. To date, foreign currency transaction gains and losses have not been material to our financial statements, and we have not engaged in any foreign currency hedging transactions.

Interest Rate Risk

We had total outstanding debt of \$181.2 million as of September 27, 2019, exclusive of \$3.2 million in debt issuance costs, of which \$8.8 million was due within 12 months. The outstanding amount of debt included elsewhere in this report is net of debt issuance costs.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. The interest rate on our outstanding debt is variable based on LIBOR, the Prime Rate, or the Federal Funds Rate. A hypothetical 1% change in the interest rate on our outstanding debt would have resulted in a \$0.5 million change to interest expense during the third quarter of 2019, or \$1.8 million on an annualized basis.

ITEM 4. CONTROLS AND PROCEDURES

We were the target of criminal fraud by persons impersonating one of our suppliers, which resulted in the transfer of funds to unauthorized bank accounts. The fraud did not represent a breach of our information systems, as confirmed by an external forensic examination, but rather it was a targeted phishing scam. Although our internal controls were not properly designed to prevent and timely detect the transfer of funds to unauthorized accounts, a secondary control was properly designed and operated effectively, which aided in a full recovery of all funds that were transferred. Accordingly, there was no financial loss to record in our financial statements.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based on this evaluation, our CEO and CFO concluded that, because of a material weakness in our internal control over financial reporting, our disclosure controls and procedures were not effective as of September 27, 2019.

Notwithstanding the identified material weakness described below, we did not identify any misstatements in our reported operating results or financial condition and we have determined that the financial statements and other information included in this report and other periodic filings present fairly in all material respects our financial condition, results of operations, and cash flows at and for the periods presented in accordance with U.S. GAAP.

We determined that certain internal controls required for safeguarding our cash assets were not properly designed due to insufficient specificity regarding our policies and procedures surrounding supplier banking information changes, not identifying segregation of duties, and insufficient training on exercising professional skepticism.

Remediation of the Material Weakness

We have initiated a remediation plan and have completed the following actions:

- enhanced the approval process for adding or modifying supplier banking information;
- increased the level of segregation of duties surrounding those who have the ability to modify supplier information, and;
- increased communication of our internal controls and processes and emphasized security awareness and the importance of exercising professional skepticism

We will continue to assess whether additional control enhancements are necessary. After the remediation plan is completed and in effect for a sufficient period of time, we will perform testing to determine its operating effectiveness.

Changes in Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed by, or under the supervision of, a company's principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate. If we cannot provide reliable financial information, our business, operating results and share price could be negatively impacted. Other than the changes associated with the remediation plan described above, there have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the nine months ended September 27, 2019 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

For a discussion of legal proceedings, see "Note 1 – Basis of Presentation and Selected Significant Accounting Policies, Commitments and Contingencies" in the Notes to Financial Statements (Unaudited) included in this report.

ITEM 1A. RISK FACTORS

There have been no material changes in our risk factors from those disclosed in our 2018 Annual Report, except that we are updating the risk factor entitled "*In the second quarter of 2017, we identified material weaknesses in our internal control over financial reporting and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If our internal control over financial reporting or our disclosure controls and procedures are not effective, we may not be able to accurately report our financial results, prevent fraud or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our share price*" as set forth below. These risk factors could materially and adversely affect our business, financial condition and results of operations, and the trading price of our ordinary shares could decline. These risk factors do not identify all risks that we face – our operations could also be affected by factors that are not presently known to us or that we currently consider to be immaterial to our operations. Due to risks and uncertainties, known and unknown, our past financial results may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

In previous periods, we identified material weaknesses in our internal control over financial reporting and, if we are unable to satisfy regulatory requirements relating to internal controls or if our internal control over financial reporting is not effective, our business and stock price could be adversely affected.

In connection with Section 404 of the Sarbanes-Oxley Act, we have identified in the past and may, from time-to-time in the future, identify issues with our internal controls and deficiencies in our internal control over financial reporting. The most recent material weakness was identified by management during the quarter ended September 27, 2019, and was related to the prevention and timely detection of unauthorized cash disbursements. In the past, we have identified other material weaknesses in our internal control over financial reporting, as described in our 2018 Annual Report. If our remediation plan is not effective or if our internal control over financial reporting or our disclosure controls and procedures are not effective, we may not be able to accurately report our financial results, prevent fraud or file our periodic reports in a timely manner, which may cause investors to lose confidence in our reported financial information and may lead to a decline in our stock price.

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

Share Repurchase Program

Information related to repurchases of our ordinary shares during the nine months ended September 27, 2019 is as follows:

	Total Number of Shares Repurchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Amount Available Under Repurchase Program (1)
	<i>(dollars in thousands, except per share amounts)</i>			
Amount available at December 28, 2018				\$ 10,021
December 2018	43,500	\$ 16.17	43,500	\$ 9,317
January 2019	54,410	\$ 16.47	54,410	\$ 8,421
February 2019	—	\$ —	—	\$ 8,421
March 2019	—	\$ —	—	\$ 8,421
Quarter ended March 29, 2019	<u>97,910</u>	<u>\$ 16.34</u>	<u>97,910</u>	<u>\$ 8,421</u>
Quarter ended June 28, 2019	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ 8,421</u>
Quarter ended September 27, 2019	<u>—</u>	<u>\$ —</u>	<u>—</u>	<u>\$ 8,421</u>

- (1) The amounts presented in this column are the remaining total authorized value to be spent after each month's repurchases. On February 15, 2018, we announced that our Board of Directors authorized a \$50.0 million share repurchase program under which we may repurchase our ordinary shares in the open market or through privately negotiated transactions, depending on market conditions and other factors. Repurchases were funded with cash on-hand and cash flows from operations. On August 18, 2018, our Board of Directors increased the amount authorized under the share repurchase program by \$50.0 million.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
<u>31.1*</u>	<u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.2*</u>	<u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>32.1**</u>	<u>Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>32.2**</u>	<u>Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** Furnished herewith and not filed.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ICHOR HOLDINGS, LTD.

Date: November 6, 2019

By: _____
/s/ Thomas M. Rohrs
Thomas M. Rohrs
Executive Chairman, Director and Chief Executive Officer
(Principal Executive Officer)

Date: November 6, 2019

By: _____
/s/ Larry J. Sparks
Larry J. Sparks
Chief Financial Officer
(Principal Accounting and Financial Officer)

CEO CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Thomas M. Rohrs, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ichor Holdings, Ltd.;
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.

Date: November 6, 2019

By: _____ /s/ Thomas M. Rohrs
 Thomas M. Rohrs
 Chief Executive Officer

CFO CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jeffrey S. Andreson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Ichor Holdings, Ltd.;
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.

Date: November 6, 2019

By: _____ /s/ Larry J. Sparks
Larry J. Sparks
Chief Financial Officer

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ichor Holdings, Ltd. (the "Company") on Form 10-Q for the period ending September 27, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, to my knowledge, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: November 6, 2019

By: _____
/s/ Thomas M. Rohrs
Thomas M. Rohrs
Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ichor Holdings, Ltd. (the "Company") on Form 10-Q for the period ending September 27, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, to my knowledge, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: November 6, 2019

By: _____
/s/ Larry J. Sparks
Larry J. Sparks
Chief Financial Officer