

ICHOR HOLDINGS, LTD.

FORM 10-Q (Quarterly Report)

Filed 05/05/20 for the Period Ending 03/27/20

Address	3185 LAURELVIEW CT. FREMONT, CA, 94538
Telephone	510-897-5200
CIK	0001652535
Symbol	ICHR
SIC Code	3674 - Semiconductors and Related Devices
Industry	Semiconductors
Sector	Technology
Fiscal Year	12/27

**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 March 27, 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: 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

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

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

As of May 1, 2020, the registrant had 22,808,456 ordinary shares, \$0.0001 par value per share, outstanding.

TABLE OF CONTENTS

PART I		
ITEM 1.	<u>FINANCIAL STATEMENTS (UNAUDITED)</u>	1
ITEM 2.	<u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	12
ITEM 3.	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	18
ITEM 4.	<u>CONTROLS AND PROCEDURES</u>	18
PART II		
ITEM 1.	<u>LEGAL PROCEEDINGS</u>	19
ITEM 1A.	<u>RISK FACTORS</u>	19
ITEM 2.	<u>UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS</u>	20
ITEM 3.	<u>DEFAULTS UPON SENIOR SECURITIES</u>	20
ITEM 4.	<u>MINE SAFETY DISCLOSURES</u>	20
ITEM 5.	<u>OTHER INFORMATION</u>	20
ITEM 6.	<u>EXHIBITS</u>	20
	<u>SIGNATURES</u>	21

PART I

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

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

	March 27, 2020	December 27, 2019
Assets		
Current assets:		
Cash	\$ 41,583	\$ 60,612
Accounts receivable, net	87,573	84,849
Inventories, net	143,721	127,037
Prepaid expenses and other current assets	6,868	4,449
Total current assets	279,745	276,947
Property and equipment, net	44,486	44,541
Operating lease right-of-use assets	12,985	14,198
Other noncurrent assets	1,084	1,094
Deferred tax assets, net	4,016	4,738
Intangible assets, net	48,693	52,027
Goodwill	173,010	173,010
Total assets	<u>\$ 564,019</u>	<u>\$ 566,555</u>
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 119,076	\$ 131,578
Accrued liabilities	12,071	12,814
Other current liabilities	6,108	5,233
Current portion of long-term debt	8,750	8,750
Current portion of lease liabilities	5,432	5,492
Total current liabilities	151,437	163,867
Long-term debt, less current portion, net	172,359	169,304
Lease liabilities, less current portion	7,962	9,081
Deferred tax liabilities	210	210
Other non-current liabilities	2,531	2,677
Total liabilities	334,499	345,139
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; 22,806,679 and 22,618,708 shares outstanding, respectively; 27,244,118 and 27,056,147 shares issued, respectively)	2	2
Additional paid in capital	247,023	242,318
Treasury shares at cost (4,437,439 and 4,437,439 shares, respectively)	(91,578)	(91,578)
Retained earnings	74,073	70,674
Total shareholders' equity	229,520	221,416
Total liabilities and shareholders' equity	<u>\$ 564,019</u>	<u>\$ 566,555</u>

See accompanying notes.

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

	Three Months Ended	
	March 27, 2020	March 29, 2019
Net sales	\$ 220,028	\$ 137,831
Cost of sales	191,254	117,608
Gross profit	28,774	20,223
Operating expenses:		
Research and development	3,322	2,391
Selling, general, and administrative	16,618	11,758
Amortization of intangible assets	3,334	3,137
Total operating expenses	23,274	17,286
Operating income	5,500	2,937
Interest expense	2,374	2,768
Other expense (income), net	(31)	24
Income before income taxes	3,157	145
Income tax benefit	(242)	(1,373)
Net income	3,399	1,518
Net income per share:		
Basic	\$ 0.15	\$ 0.07
Diluted	\$ 0.15	\$ 0.07
Shares used to compute net income per share:		
Basic	22,737,163	22,269,827
Diluted	23,181,127	22,536,209

See accompanying notes.

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

For the three months ending March 27, 2020	Ordinary Shares		Additional Paid-In Capital	Treasury Shares		Retained Earnings	Total Shareholders' Equity
	Shares	Amount		Shares	Amount		
Balance at December 27, 2019	22,618,708	\$ 2	\$ 242,318	4,437,439	\$ (91,578)	\$ 70,674	\$ 221,416
Ordinary shares issued from exercise of stock options	113,539	—	2,483	—	—	—	2,483
Ordinary shares issued from vesting of restricted share units	57,912	—	(993)	—	—	—	(993)
Ordinary shares issued from employee share purchase plan	16,520	—	350	—	—	—	350
Share-based compensation expense	—	—	2,865	—	—	—	2,865
Net income	—	—	—	—	—	3,399	3,399
Balance at March 27, 2020	<u>22,806,679</u>	<u>\$ 2</u>	<u>\$ 247,023</u>	<u>4,437,439</u>	<u>\$ (91,578)</u>	<u>\$ 74,073</u>	<u>\$ 229,520</u>

For the three months ending March 29, 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	186,915	—	1,904	—	—	—	1,904
Ordinary shares issued from vesting of restricted share units	24,115	—	(111)	—	—	—	(111)
Ordinary shares issued from employee share purchase plan	22,501	—	312	—	—	—	312
Repurchase of ordinary shares	(97,910)	—	—	97,910	(1,599)	—	(1,599)
Share-based compensation expense	—	—	1,330	—	—	—	1,330
Net income	—	—	—	—	—	1,518	1,518
Balance at March 29, 2019	<u>22,370,129</u>	<u>\$ 2</u>	<u>\$ 231,793</u>	<u>4,437,439</u>	<u>\$ (91,578)</u>	<u>\$ 61,463</u>	<u>\$ 201,680</u>

See accompanying notes.

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

	Three Months Ended	
	March 27, 2020	March 29, 2019
Cash flows from operating activities:		
Net income	\$ 3,399	\$ 1,518
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation and amortization	5,737	5,210
Share-based compensation	2,865	1,330
Deferred income taxes	722	3
Amortization of debt issuance costs	243	212
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable, net	(2,724)	(13,610)
Inventories, net	(16,684)	6,935
Prepaid expenses and other assets	(868)	1,357
Accounts payable	(12,380)	895
Accrued liabilities	(568)	(1,994)
Other liabilities	(778)	(2,279)
Net cash used in operating activities	<u>(21,036)</u>	<u>(423)</u>
Cash flows from investing activities:		
Capital expenditures	(2,470)	(4,782)
Net cash used in investing activities	<u>(2,470)</u>	<u>(4,782)</u>
Cash flows from financing activities:		
Issuance of ordinary shares under share-based compensation plans	2,658	2,067
Employees' taxes paid upon vesting of restricted share units	(993)	(111)
Repurchase of ordinary shares	—	(1,599)
Borrowings on revolving credit facility	5,000	5,000
Repayments on revolving credit facility	—	(8,000)
Repayments on term loan	(2,188)	(4,375)
Net cash provided by (used in) financing activities	<u>4,477</u>	<u>(7,018)</u>
Net decrease in cash	<u>(19,029)</u>	<u>(12,223)</u>
Cash at beginning of period	60,612	43,834
Cash at end of period	<u>\$ 41,583</u>	<u>\$ 31,611</u>
Supplemental disclosures of cash flow information:		
Cash paid during the period for interest	\$ 2,136	\$ 3,255
Cash paid during the period for taxes, net of refunds	\$ 34	\$ 107
Supplemental disclosures of non-cash activities:		
Capital expenditures included in accounts payable	\$ 652	\$ 958
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 328	\$ —

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 March 27, 2020 and March 29, 2019 were both 13 weeks. References to the first quarter of 2020 and 2019 refer to the three-month periods then ended. References to fiscal year 2020 refer to our fiscal year ending December 25, 2020.

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 effect on our financial position or results of operations. Subsequent to the end of the first quarter, but before these financial statements were issued, we reached a mutual settlement with the counterparty of a contract dispute and, accordingly, recorded a \$1.4 million contract settlement loss to cost of sales, as the settlement provided evidence relating to a loss that existed at March 27, 2020.

Accounting Pronouncements Recently Adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This standard changes the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. We adopted the standard on the first day of the first quarter of 2020, and the adoption did not have a significant impact on our financial statements.

In August 2018, the FASB issued ASU 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*. The new guidance clarifies the accounting for implementation costs in cloud computing arrangements. We adopted the standard on the first day of the first quarter of 2020, and the adoption did not have a significant impact on our financial statements.

Note 2 – Inventories

Inventories consist of the following:

	March 27, 2020	December 27, 2019
Raw materials	\$ 94,811	\$ 85,329
Work in process	42,188	31,825
Finished goods	14,244	17,700
Excess and obsolete adjustment	(7,522)	(7,817)
Total inventories, net	<u>\$ 143,721</u>	<u>\$ 127,037</u>

Note 3 – Property and Equipment

Property and equipment consist of the following:

	March 27, 2020	December 27, 2019
Machinery	\$ 35,449	\$ 33,684
Leasehold improvements	28,001	27,835
Computer software, hardware, and equipment	5,920	5,796
Office furniture, fixtures and equipment	1,038	1,040
Vehicles	26	26
Construction-in-process	4,074	3,760
	<u>74,508</u>	<u>72,141</u>
Less accumulated depreciation	(30,022)	(27,600)
Total property and equipment, net	<u>\$ 44,486</u>	<u>\$ 44,541</u>

Depreciation expense was \$2.4 million and \$2.1 million for the first quarter of 2020 and 2019, respectively.

Note 4 – Intangible Assets

Definite-lived intangible assets consist of the following:

	March 27, 2020				
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	Weighted average useful life
Trademarks	\$ 9,690	\$ (7,992)	\$ —	\$ 1,698	10.0 years
Customer relationships	82,986	(45,445)	—	37,541	7.8 years
Developed technology	11,047	(1,593)	—	9,454	10.0 years
Total intangible assets	<u>\$ 103,723</u>	<u>\$ (55,030)</u>	<u>\$ —</u>	<u>\$ 48,693</u>	

	December 27, 2019				
	Gross value	Accumulated amortization	Accumulated impairment charges	Carrying amount	Weighted average useful life
Trademarks	\$ 9,690	\$ (7,750)	\$ —	\$ 1,940	10.0 years
Customer relationships	82,986	(42,621)	—	40,365	7.8 years
Developed technology	11,047	(1,325)	—	9,722	10.0 years
Total intangible assets	<u>\$ 103,723</u>	<u>\$ (51,696)</u>	<u>\$ —</u>	<u>\$ 52,027</u>	

Note 5 – Leases

Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. For purposes of calculating operating lease ROU assets and operating lease liabilities, we use the non-cancellable lease term plus options to extend that we are reasonably certain to take. Lease expense for operating lease payments is recognized on a straight-line basis over the lease term. Our leases generally do not provide an implicit rate. As such, 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 2025. 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 March 27, 2020, 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	
	March 27, 2020	March 29, 2019
Operating lease cost	\$ 1,320	\$ 1,633

Supplemental cash flow information related to leases is as follows:

	Three Months Ended	
	March 27, 2020	March 29, 2019
Cash paid for amounts included in the measurement of lease liabilities:	\$ 1,284	\$ 1,164
Operating cash flows from operating leases		
Weighted-average remaining lease term of operating leases	2.9 years	3.8 years
Weighted-average discount rate of operating leases	4.5%	4.5%

Future minimum lease payments under non-cancelable leases as of March 27, 2020 are as follows:

2020, remaining	\$	4,122
2021		4,830
2022		4,058
2023		1,163
2024		192
Thereafter		26
Total future minimum lease payments		14,391
Less imputed interest		(997)
Total lease liabilities	\$	<u>13,394</u>

Note 6 – Income Taxes

Coronavirus Aid, Relief, and Economic Security (“CARES”) Act

In response to the COVID-19 pandemic, the CARES Act was signed into law in March 2020. The CARES Act lifts certain deduction limitations originally imposed by the Tax Cuts and Jobs Act of 2017 (the “2017 Tax Act”). Corporate taxpayers may carryback net operating losses (“NOLs”) originating in 2018 through 2020 for up to five years, which was not previously allowed under the 2017 Tax Act. The CARES Act also eliminates the existing limitation on taxable income of 80% by allowing corporate entities to fully utilize NOL carryforwards to offset taxable income in 2018, 2019, or 2020. Taxpayers may generally deduct interest up to the sum of 50% of adjusted taxable income, plus business interest income, subject to the existing 30% limit under the 2017 Tax Act, for 2019 and 2020. The CARES Act allows taxpayers with alternative minimum tax credits to claim a refund in 2020 for the entire amount of the credits instead of recovering the credits through refunds over a period of years, as originally enacted by the 2017 Tax Act.

In addition, the CARES Act raises the corporate charitable deduction limit to 25% of taxable income and makes qualified improvement property generally eligible for 15-year cost-recovery and 100% bonus depreciation.

With the enactment of the CARES Act, we expect to generate an additional income tax refund of approximately \$0.7 million from our NOL carryback provision, resulting from the benefit from additional interest and depreciation deductions. Accordingly, we recognized a benefit of \$0.2 million related to the CARES Act in our income tax provision for the first quarter of 2020.

Income tax information for the periods reported are as follows:

	Three Months Ended	
	March 27, 2020	March 29, 2019
Income tax benefit	\$ (242)	\$ (1,373)
Income before income taxes	\$ 3,157	\$ 145
Effective income tax rate	-7.7%	-946.9%

Our effective tax rate for the first quarter of 2020 differs from the statutory rate due to taxes on foreign income that differ from the U.S. tax rate and the release of the certain tax reserves related to statute of limitation expirations and settlements, excess tax benefits from share-based compensation and the impact of the CARES Act.

Our effective tax rate for the first quarter of 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.

The ending balance for the unrecognized tax benefits for uncertain tax positions was approximately \$2.1 million at March 27, 2020. 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 March 27, 2020, 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 \$0.5 million and \$0.4 million for the first quarter of 2020 and 2019, respectively.

Note 8 – Long-Term Debt

Long-term debt consists of the following:

	March 27, 2020	December 27, 2019
Term loan	\$ 159,687	\$ 161,875
Revolving credit facility	24,162	19,162
Total principal amount of long-term debt	183,849	181,037
Less unamortized debt issuance costs	(2,740)	(2,983)
Total long-term debt, net	181,109	178,054
Less current portion	(8,750)	(8,750)
Total long-term debt, less current portion, net	<u>\$ 172,359</u>	<u>\$ 169,304</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 March 27, 2020, the term loan and revolving credit facility bore interest at the Eurodollar rate option of 4.44% and 4.19%, 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 – 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. Forfeited or expired awards are returned to the incentive plan pool for future grants. Awards generally vest over four years, 25% on the first anniversary of the date of grant and quarterly thereafter over the remaining 3 years. 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 \$2.9 million and \$1.3 million for the first quarter of 2020 and 2019, 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 27, 2019	1,688,938	65,908	\$ 20.57		
Granted	37,952	—	\$ 31.89		
Exercised	(113,539)	—	\$ 21.87		
Forfeited or expired	—	—	\$ —		
Outstanding, March 27, 2020	<u>1,613,351</u>	<u>65,908</u>	\$ 20.74	4.5 years	\$ 3,803
Exercisable, March 27, 2020	<u>697,920</u>	<u>65,908</u>	\$ 17.49	3.2 years	\$ 3,604

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 27, 2019	389,170	17,730	\$ 23.03
Granted	78,479	—	\$ 32.08
Vested	(88,399)	—	\$ 23.72
Forfeited	—	—	\$ —
Unvested, March 27, 2020	<u>379,250</u>	<u>17,730</u>	\$ 24.67

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 first quarter of 2020, 16,520 ordinary shares were purchased by eligible employees under the 2017 ESPP. As of March 27, 2020, approximately 2.4 million ordinary shares remain available for purchase under the 2017 ESPP.

Note 10 – 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	
	March 27, 2020	March 29, 2019
United States of America	\$ 120,841	\$ 76,633
Singapore	73,209	36,979
Europe	14,959	15,093
Other	11,019	9,126
Total net sales	<u>\$ 220,028</u>	<u>\$ 137,831</u>

Note 11 – 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	
	March 27, 2020	March 29, 2019
Numerator:		
Net income	\$ 3,399	\$ 1,518
Denominator:		
Basic weighted average ordinary shares outstanding	22,737,163	22,269,827
Dilutive effect of options	322,469	243,136
Dilutive effect of RSUs	119,960	19,046
Dilutive effect of ESPP	1,535	4,200
Diluted weighted average ordinary shares outstanding	23,181,127	22,536,209
Earnings per share:		
Net income:		
Basic	\$ 0.15	\$ 0.07
Diluted	\$ 0.15	\$ 0.07

A combined total of approximately 720,000 and 1,320,000 potentially dilutive options and RSUs were excluded from the calculation of net income per share for the first quarter of 2020 and 2019, 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, South 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	
	March 27, 2020	March 29, 2019
	<i>(dollars in thousands)</i>	
Net sales	\$ 220,028	\$ 137,831
Gross profit	\$ 28,774	\$ 20,223
Gross margin	13.1%	14.7%
Operating expenses	\$ 23,274	\$ 17,286
Operating income	\$ 5,500	\$ 2,937
U.S. GAAP net income	\$ 3,399	\$ 1,518
Non-GAAP net income (1)	\$ 12,058	\$ 5,551

(1) Please see “Non-GAAP Results” within Item 2 for a reconciliation of Non-GAAP net income to U.S. GAAP net income.

COVID-19 Pandemic and Market Conditions Update

The COVID-19 pandemic and related economic repercussions have created, and are expected to continue to create, significant volatility, uncertainty, and turmoil in our industry. Government shutdowns and “social distancing” guidelines are, and will continue to, result in reduced factory capacity. In addition, an increase in direct costs within our factories associated with employee personal protective equipment (“PPE”), facility cleaning and layout changes, together with increases in logistics costs and employee labor costs, as well as other operating inefficiencies have resulted in, and may continue to result in, lower revenues and operating margins. The extent and duration of these impacts cannot be specifically quantified given the dynamic nature and breadth of the pandemic’s impact on our operations and that of our customers and suppliers. See “Risk Factors” in Part II, Item 1A of this Current Report on Form 10-Q.

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	
	March 27, 2020	March 29, 2019
<i>(in thousands)</i>		
Consolidated Statements of Operations Data:		
Net sales	\$ 220,028	\$ 137,831
Cost of sales	191,254	117,608
Gross profit	28,774	20,223
Operating expenses:		
Research and development	3,322	2,391
Selling, general, and administrative	16,618	11,758
Amortization of intangible assets	3,334	3,137
Total operating expenses	23,274	17,286
Operating income	5,500	2,937
Interest expense	2,374	2,768
Other expense (income), net	(31)	24
Income before income taxes	3,157	145
Income tax benefit	(242)	(1,373)
Net income	3,399	1,518

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

	Three Months Ended	
	March 27, 2020	March 29, 2019
Consolidated Statements of Operations Data:		
Net sales	100.0	100.0
Cost of sales	86.9	85.3
Gross profit	13.1	14.7
Operating expenses:		
Research and development	1.5	1.7
Selling, general, and administrative	7.6	8.5
Amortization of intangible assets	1.5	2.3
Total operating expenses	10.6	12.5
Operating income	2.5	2.1
Interest expense	1.1	2.0
Other expense (income), net	0.0	0.0
Income before income taxes	1.4	0.1
Income tax benefit	(0.1)	(1.0)
Net income	1.5	1.1

Comparison of the Three Months Ended March 27, 2020 and March 29, 2019

Net Sales

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Net sales	\$ 220,028	\$ 137,831	\$ 82,197	59.6%

The increase in net sales from the first quarter of 2019 to the first quarter of 2020 was primarily due to increased demand from our customers as a result of growth in the global wafer fabrication equipment market as it comes out of the recent cyclical downturn, as well as share-gains at our largest customers, partially offset by lower shipments due to factory output limitations associated with the COVID-19 pandemic (see “COVID-19 Pandemic and Market Conditions Update” above for expanded commentary). On a geographic basis, sales in the U.S. increased by \$44.2 million to \$120.8 million and foreign sales increased by \$38.0 million to \$99.2 million.

Cost of Sales and Gross Profit

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Cost of sales	\$ 191,254	\$ 117,608	\$ 73,646	62.6%
Gross profit	\$ 28,774	\$ 20,223	\$ 8,551	42.3%
Gross margin	13.1%	14.7%		- 160 bps

The increase in cost of sales and gross profit from the first quarter of 2019 to the first quarter of 2020 was primarily due to increased sales volume.

The decrease in our gross margin from the first quarter of 2019 to the first quarter of 2020 was primarily due increased costs to operate our production facilities and lower factory utilization in response to the COVID-19 pandemic (see “COVID-19 Pandemic and Market Conditions Update” above for expanded commentary). Our facilities in California and Malaysia were shutdown, pursuant to governmental orders, for durations ranging from approximately 1-2 weeks near the end of the quarter. Additionally, during the first quarter of 2020, we reached a mutual settlement with the counterparty of a contract dispute and, accordingly, recorded a \$1.4 million contract settlement loss to cost of sales. The impact of this settlement loss resulted in a 60 basis point reduction in our gross margin.

Research and Development

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Research and development	\$ 3,322	\$ 2,391	\$ 931	38.9%

The increase in research and development expenses from the first quarter of 2019 to the first quarter of 2020 was primarily due to \$0.7 million in increased employee-related expense resulting from increased engineering headcount, of which approximately \$0.4 million was due to a small engineering team assumed in connection with our purchase of developed technology assets in the second quarter of 2019.

Selling, General, and Administrative

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Selling, general, and administrative	\$ 16,618	\$ 11,758	\$ 4,860	41.3%

The increase in selling, general, and administrative expense from the first quarter of 2019 to the first quarter of 2020 was primarily due (i) \$1.8 million in executive transition costs associated with the transition of our former CEO to Executive Chairman, (ii) \$2.8 million in increased employee-related expense, of which \$1.4 million was from increased share-based compensation expense, (iii) \$0.4 million in increased legal and professional fees, and (iv) \$0.3 million in increased occupancy costs; partially offset by the release of a \$0.7 million indemnification asset in the first quarter of 2019, which was recorded in connection with our acquisition of Cal-Weld in 2017, that did not repeat in the first quarter of 2020.

Amortization of Intangible Assets

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Amortization of intangibles assets	\$ 3,334	\$ 3,137	\$ 197	6.3%

The increase in amortization expense from the first quarter of 2019 to the first quarter of 2020 was primarily due to incremental amortization expense from purchased developed technology assets during the second quarter of 2019.

Interest Expense

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Interest expense	\$ 2,374	\$ 2,768	\$ (394)	-14.2%

The decrease in interest expense from the first quarter of 2019 to the first quarter of 2020 was primarily due to a decrease in our weighted average interest rate, from 4.77% to 4.44%, and a \$23.4 million decrease in our average amount borrowed during the quarter.

Other Expense (Income), Net

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Other expense (income), net	\$ (31)	\$ 24	\$ (55)	n/m

The change in other income, net was primarily due to exchange rate fluctuations on transactions denominated in the local currencies of our foreign operations, principally the Singapore dollar, Malaysian ringgit, British pound, euro, and South Korean won.

Income Tax Benefit

	Three Months Ended		Change	
	March 27, 2020	March 29, 2019	Amount	%
	<i>(dollars in thousands)</i>			
Income tax benefit	\$ (242)	\$ (1,373)	\$ 1,131	-82.4%

The decrease in income tax benefit from the first quarter of 2019 to the first quarter of 2020 was primarily due to a decrease in releases of certain tax reserves related to statute of limitation expirations or settlements in the first quarter of 2020 compared to the first quarter of 2019.

Non-GAAP Results

Management uses non-GAAP metrics 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 net income is defined as: net income excluding (1) amortization of intangible assets, share-based compensation expense, and non-recurring expenses, including contract settlement losses; and (2) the tax impacts associated with our non-GAAP adjustments, as well as non-recurring discrete tax items. Non-GAAP diluted EPS is defined as non-GAAP net income divided by weighted average diluted ordinary shares outstanding during the period.

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

	Three Months Ended	
	March 27, 2020	March 29, 2019
<i>(dollars in thousands, except per share amounts)</i>		
Non-GAAP Data:		
U.S. GAAP net income	\$ 3,399	\$ 1,518
Non-GAAP adjustments:		
Amortization of intangible assets	3,334	3,137
Share-based compensation	2,865	1,330
Other non-recurring expense, net (1)	2,690	1,351
Contract settlement loss (2)	1,386	—
Tax adjustments related to non-GAAP adjustments (3)	(1,616)	(1,785)
Non-GAAP net income	\$ 12,058	\$ 5,551
U.S. GAAP diluted EPS	\$ 0.15	\$ 0.07
Non-GAAP diluted EPS	\$ 0.52	\$ 0.25
Shares used to compute diluted EPS	23,181,127	22,536,209

- (1) Included in this amount for the first quarter of 2020 are (i) a \$1.8 million bonus payment to our former CEO in connection with his transition to executive chairman, (ii) acquisition-related expenses, comprised primarily of expense associated with a two-year retention agreement between the Company and key management personnel of IAN (the "IAN retention agreement"), which we acquired in April 2018, and (iii) non-capitalizable costs incurred in connection with our implementation of a new ERP system and a Sarbanes-Oxley ("SOX") compliance program.

Included in this amount for the first quarter of 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 the IAN retention agreement, (ii) costs incurred in connection with reorganizing our key personnel and leadership, and (iii) non-capitalizable costs incurred in connection with our implementation of a new ERP system.

- (2) During the first quarter of 2020, we reached a mutual settlement with the counterparty of a contract dispute and, accordingly, recorded a \$1.4 million contract settlement loss to cost of sales.
- (3) Adjusts U.S. GAAP income tax benefit for impact of our non-GAAP adjustments, as defined, including the impacts of excluding share-based compensation, amortization of intangible assets, and other non-recurring expenses. This adjustment also excludes the impact of non-recurring discrete tax items, including the release of tax reserves related to purchase accounting and the release or placement of a valuation allowance.

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

Because of these limitations, you should consider non-GAAP results alongside other financial performance measures and results presented in accordance with GAAP. In addition, in evaluating non-GAAP results, you should be aware that in the future we will incur expenses such as those that are the subject of adjustments in deriving non-GAAP results and you should not infer from our presentation of non-GAAP results 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 first quarter of 2020 with cash of \$41.6 million, a decrease of \$19.0 million from the end of the prior quarter. The decrease was primarily due to cash used in operating activities of \$21.0 million and capital expenditures of \$2.5 million, partially offset by net proceeds from our credit facilities of \$2.8 million and net proceeds from the issuance of ordinary shares under our share-based compensation plans of \$1.7 million.

The various impacts of the COVID-19 pandemic on the U.S. economy, our operations, and our industry have been significant. Nonetheless, at this time, 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

	Three Months Ended	
	March 27, 2020	March 29, 2019
	<i>(in thousands)</i>	
Cash used in operating activities	\$ (21,036)	\$ (423)
Cash used in investing activities	(2,470)	(4,782)
Cash provided by (used in) financing activities	4,477	(7,018)
Net decrease in cash	<u>\$ (19,029)</u>	<u>\$ (12,223)</u>

Operating Activities

Our cash used in operating activities during the first quarter of 2020 of \$21.0 million consists of net income of \$3.4 million and net non-cash charges of \$9.6 million, offset by an increase in our net operating assets and liabilities of \$34.0 million. Net non-cash charges primarily consist of depreciation and amortization of \$5.7 million and share-based compensation of \$2.9 million. The increase in our net operating assets and liabilities was primarily due to an increase in inventories of \$16.7 million, a decrease in accounts payable of \$12.4 million, and an increase in accounts receivable of \$2.7 million.

Investing Activities

Our cash used in investing activities during the first quarter of 2020 of \$2.5 million consists of capital expenditures.

Financing Activities

Our cash provided by financing activities during the first quarter of 2020 of \$4.5 million consists of net proceeds from our credit facilities of \$2.8 million, partially offset by net proceeds from the issuance of ordinary shares under our share-based compensation plans of \$1.7 million.

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with U.S. GAAP. 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 27, 2019 (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, British pound, euro, and South Korean won. Fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our statement 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 indebtedness of \$183.8 million as of March 27, 2020, exclusive of \$2.7 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 based on LIBOR, the Prime Rate, or the Federal Funds Rate. A hypothetical 1% interest rate change on our outstanding debt would have resulted in a \$0.5 million change to interest expense during the first quarter of 2020, or \$1.8 million on an annualized basis.

ITEM 4. CONTROLS AND PROCEDURES

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 our disclosure controls and procedures were effective as of March 27, 2020.

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. 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 three months ended March 27, 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

We are currently not a party to any material pending or threatened litigation.

ITEM 1A. RISK FACTORS

This quarterly report should be read in conjunction with the risk factors included in our 2019 Annual Report. The following risk factor supersedes and replaces the risk factors contained in our 2019 Annual Report under the caption entitled, *“An outbreak of disease, global or localized health pandemic or epidemic or a similar public health threat, or the fear of such an event may impact economic activity, including, but not limited to demand for our products, workforce availability, and costs to manufacture our products.”*

The extent to which the coronavirus (COVID-19) pandemic and measures taken in response thereto impact our business, results of operations and financial condition will continue to depend on future developments, which are highly uncertain and difficult to predict.

We are closely monitoring the outbreak of respiratory illness caused by COVID-19. The virus has spread to many countries and has been declared by the World Health Organization to be a pandemic, resulting in action from federal, state and local governments that has significantly affected virtually all facets of the U.S. and global economies. The U.S. government has implemented enhanced screenings, quarantine requirements, and travel restrictions in connection with the COVID-19 outbreak.

Shelter-in-place orders and other measures, including work-from-home and social distancing policies implemented to protect employees, have resulted in reduced workforce availability at product manufacturing sites, construction delays, and reduced capacity at some of our vendors and suppliers. Restrictions on our access to or operation of manufacturing facilities or on our support operations or workforce, or similar limitations for our vendors and suppliers, can impact our ability to meet customer demand and could have a material adverse effect on our financial condition and results of operations, particularly if prolonged. Similarly, current and future restrictions or disruptions of transportation, such as reduced availability of air transport, port closures, and increased border controls or closures, can also impact our ability to meet demand and could materially adversely affect us. Our customers have experienced, and may continue to experience, disruptions in their operations and supply chains, which can result in delayed, reduced, or canceled orders, or collection risks, and which may adversely affect our results of operations.

The disruption to global markets that has occurred due to the epidemic has increased uncertainty for semi-conductor demand. It is likely that the current outbreak and continued spread of COVID-19 will cause an economic slowdown, and it is possible that it could cause a global recession. There is a significant degree of uncertainty and lack of visibility as to the extent and duration of any such slowdown or recession. Given the significant economic uncertainty and volatility created by the pandemic, it is difficult to predict the nature and extent of impacts on demand for our products. These expectations are subject to change without warning and investors are cautioned not to place undue reliance on them.

The spread of COVID-19 has caused us to modify our business practices (including employee travel, employee work locations, cancellation of physical participation in meetings, events and conferences, and social distancing measures), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers, partners, vendors, and suppliers. Work-from-home and other measures introduce additional operational risks, including cybersecurity risks, and have affected the way we conduct our product development, validation, and qualification, customer support, and other activities, which could have an adverse effect on our operations. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus, and illness and workforce disruptions could lead to unavailability of key personnel and harm our ability to perform critical functions.

The extent of the impact of COVID-19 on our operational and financial performance will depend on future developments, including, but not limited to, the duration and spread of the outbreak and related travel advisories and restrictions, all of which are highly uncertain and cannot be predicted. Preventing the effects from and responding to this market disruption if any other public health threat, related or otherwise, may further increase costs of our business and may have a material adverse effect on our business, financial condition, and results of operations.

There are no comparable recent events that provide guidance as to the effect the spread of COVID-19 as a global pandemic may have, and, as a result, the ultimate impact of the pandemic is highly uncertain and subject to change. We do not yet know the full extent of the impacts on our business, our operations or the global economy as a whole. However, the effects could materially heighten many of our known risks described in the “Risk Factors” section of our 2019 Annual Report.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
<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: May 5, 2020

By: _____
/s/ Jeffrey S. Andreson
Jeffrey S. Andreson
Chief Executive Officer
(Principal Executive Officer)

Date: May 5, 2020

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, 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: May 5, 2020

By: _____ /s/ Jeffrey S. Andreson

Jeffrey S. Andreson
Chief Executive Officer

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

I, Larry J. Sparks, 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: May 5, 2020

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 March 27, 2020 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: May 5, 2020

By: _____ /s/ Jeffrey S. Andreson
Jeffrey S. Andreson
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 March 27, 2020 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: May 5, 2020

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