UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 28, 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 No. 0-121

KULICKE AND SOFFA INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania	**23-1498399**
(State or other jurisdiction of incorporation)	(IRS Employer Identification No.)

23A Serangoon North Avenue 5 , #01-01 K&S Corporate Headquarters , Singapore 554369
(Address of principal executive offices and Zip Code)

(215) 784-6000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Without Par Value	KLIC	The Nasdaq Global Market

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

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

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 April 24, 2020 , there were 62,427,723 shares of the Registrant's Common Stock, no par value, outstanding.

KULICKE AND SOFFA INDUSTRIES, INC.

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PART I. - FINANCIAL INFORMATION

Item 1. – FINANCIAL STATEMENTS

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED CONDENSED BALANCE SHEETS (Unaudited)
(in thousands)

	As of	
	March 28, 2020	September 28, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 392,307	$ 364,184
Short-term investments	248,000	229,000
Accounts and other receivable, net of allowance for doubtful accounts of $501 and $597, respectively	199,793	195,830
Inventories, net	106,178	89,308
Prepaid expenses and other current assets	24,149	15,429
Total current assets	970,427	893,751
Property, plant and equipment, net	55,647	72,370
Operating right-of-use assets	22,692	—
Goodwill	55,946	55,691
Intangible assets, net	39,757	42,651
Deferred tax assets	6,975	6,409
Equity investments	7,427	6,250
Other assets	2,027	2,494
TOTAL ASSETS	$ 1,160,898	$ 1,079,616
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	$ 115,617	$ 60,904
Accounts payable	50,530	36,711
Operating lease liabilities	5,236	—
Income tax payable	12,358	12,494
Accrued expenses and other current liabilities	78,296	64,533
Total current liabilities	262,037	174,642
Financing obligation	—	14,207
Deferred tax liabilities	33,690	32,054
Income tax payable	74,469	80,290
Operating lease liabilities	18,550	—
Other liabilities	9,754	9,360
TOTAL LIABILITIES	$ 398,500	$ 310,553
Commitments and contingent liabilities (Note 15)		
Shareholders' equity:		
Preferred stock, without par value: Authorized 5,000 shares; issued - none	$ —	$ —
Common stock, without par value: Authorized 200,000 shares; issued 85,448 and 85,364, respectively; outstanding 62,997 and 63,172 shares, respectively	532,912	533,590
Treasury stock, at cost, 22,451 and 22,192 shares, respectively	(365,095)	(349,212)
Retained earnings	604,013	594,625
Accumulated other comprehensive loss	(9,432)	(9,940)
TOTAL SHAREHOLDERS' EQUITY	$ 762,398	$ 769,063
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 1,160,898	$ 1,079,616

The accompanying notes are an integral part of these consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS (Unaudited)
(in thousands, except per share data)

	Three months ended		Six months ended	
	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Net revenue	$ 150,741	$ 115,908	$ 295,038	$ 273,116
Cost of sales	81,438	60,335	155,371	142,744
Gross profit	69,303	55,573	139,667	130,372
Selling, general and administrative	29,160	28,461	57,818	58,902
Research and development	29,067	29,577	57,359	59,380
Operating expenses	58,227	58,038	115,177	118,282
Income/(loss) from operations	11,076	(2,465)	24,490	12,090
Interest income	2,675	3,865	5,514	7,691
Interest expense	(661)	(254)	(1,244)	(505)
Income before income taxes	13,090	1,146	28,760	19,276
Provision for income taxes	1,162	4,672	3,295	15,242
Share of results of equity-method investee, net of tax	40	29	100	72
Net income/(loss)	$ 11,888	$ (3,555)	$ 25,365	$ 3,962
Net income/(loss) per share:				
Basic	$ 0.19	$ (0.05)	$ 0.40	$ 0.06
Diluted	$ 0.19	$ (0.05)	$ 0.39	$ 0.06
Weighted average shares outstanding:				
Basic	63,679	65,930	63,675	66,530
Diluted	64,219	65,930	64,266	67,344

The accompanying notes are an integral part of these consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (Unaudited)
(in thousands)

	Three months ended		Six months ended	
	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Net income/(loss)	$ 11,888	$ (3,555)	$ 25,365	$ 3,962
Other comprehensive (loss)/income:				
Foreign currency translation adjustment	(835)	(409)	1,679	(1,388)
Unrecognized actuarial (loss)/gain on pension plan, net of tax	(41)	18	(66)	22
	(876)	(391)	1,613	(1,366)
Derivatives designated as hedging instruments:				
Unrealized (loss)/gain on derivative instruments, net of tax	(1,981)	161	(1,374)	88
Reclassification adjustment for loss on derivative instruments recognized, net of tax	72	267	269	1,132
Net (decrease)/increase from derivatives designated as hedging instruments, net of tax	(1,909)	428	(1,105)	1,220
Total other comprehensive (loss)/gain	(2,785)	37	508	(146)
Comprehensive income/(loss)	$ 9,103	$ (3,518)	$ 25,873	$ 3,816

The accompanying notes are an integral part of these consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED CONDENSED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (Unaudited)
(in thousands)

	Common Stock		Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Shareholders' Equity
	Shares	Amount				
Balances as of September 28, 2019	63,173	$ 533,590	$ (349,212)	$ 594,625	$ (9,940)	$ 769,063
Issuance of stock for services rendered	9	131	91	—	—	222
Repurchase of common stock	(224)	—	(5,369)	—	—	(5,369)
Issuance of shares for equity-based compensation	800	(7,653)	7,653	—	—	—
Equity-based compensation	—	3,387	—	—	—	3,387
Cumulative effect of accounting changes	—	—	—	(769)	—	(769)
Cash dividend declared	—	—	—	(7,651)	—	(7,651)
Components of comprehensive income:						
Net income	—	—	—	13,477	—	13,477
Other comprehensive income	—	—	—	—	3,293	3,293
Total comprehensive income	—	—	—	13,477	3,293	16,770
Balances as of December 28, 2019	63,758	$ 529,455	$ (346,837)	$ 599,682	$ (6,647)	$ 775,653
Issuance of stock for services rendered	8	142	79	—	—	221
Repurchase of common stock	(872)	—	(18,522)	—	—	(18,522)
Issuance of shares for equity-based compensation	103	(185)	185	—	—	—
Equity-based compensation	—	3,500	—	—	—	3,500
Cash dividend declared	—	—	—	(7,557)	—	(7,557)
Components of comprehensive income/(loss):						
Net income	—	—	—	11,888	—	11,888
Other comprehensive loss	—	—	—	—	(2,785)	(2,785)
Total comprehensive income/(loss)	—	—	—	11,888	(2,785)	9,103
Balances as of March 28, 2020	62,997	$ 532,912	$ (365,095)	$ 604,013	$ (9,432)	$ 762,398

	Common Stock		Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Shareholders' Equity
	Shares	Amount				
Balances as of September 29, 2018	67,143	$ 519,244	$ (248,664)	$ 613,529	$ (3,902)	$ 880,207
Issuance of stock for services rendered	8	195	—	—	—	195
Repurchase of common stock	(1,233)	—	(25,485)	—	—	(25,485)
Issuance of shares for equity-based compensation	642	—	—	—	—	—
Equity-based compensation	—	3,678	—	—	—	3,678
Cumulative effect of accounting changes	—	—	—	534	—	534
Cash dividend declared	—	—	—	(8,055)	—	(8,055)
Components of comprehensive income/(loss):						
Net income	—	—	—	7,517	—	7,517
Other comprehensive loss	—	—	—	—	(182)	(182)
Total comprehensive income/(loss)	—	—	—	7,517	(182)	7,335
Balances as of December 29, 2018	66,560	$ 523,117	$ (274,149)	$ 613,525	$ (4,084)	$ 858,409
Issuance of stock for services rendered	10	195	—	—	—	195
Repurchase of common stock	(1,225)	—	(26,922)	—	—	(26,922)
Issuance of shares for equity-based compensation	4	—	—	—	—	—
Equity-based compensation	—	3,107	—	—	—	3,107
Cash dividend declared	—	—	—	(8,057)	—	(8,057)
Components of comprehensive (loss)/income:						
Net loss	—	—	—	(3,555)	—	(3,555)
Other comprehensive income	—	—	—	—	37	37
Total comprehensive (loss)/income	—	—	—	(3,555)	37	(3,518)
Balances as of March 30, 2019	65,349	$ 526,419	$ (301,071)	$ 601,913	$ (4,047)	$ 823,214

The accompanying notes are an integral part of these consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS (Unaudited)
(in thousands)

	Six months ended	
	March 28, 2020	March 30, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 25,365	$ 3,962
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	9,528	10,006
Equity-based compensation and employee benefits	7,330	7,175
Adjustment for doubtful accounts	(95)	(385)
Adjustment for inventory valuation	2,176	1,164
Deferred income taxes	1,081	(665)
Loss on disposal of property, plant and equipment	808	4
Unrealized foreign currency translation	842	270
Share of results of equity-method investee	100	72
Changes in operating assets and liabilities:		
Accounts and other receivable	(3,821)	104,898
Inventories	(19,013)	11,421
Prepaid expenses and other current assets	(8,721)	1,235
Accounts payable, accrued expenses and other current liabilities	29,645	(54,850)
Income tax payable	(5,958)	(1,341)
Other, net	(184)	369
Net cash provided by operating activities	39,083	83,335
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(4,691)	(6,311)
Purchase of equity investments	(1,288)	(5,000)
Purchase of short-term investments	(169,000)	(340,000)
Maturity of short-term investments	150,000	425,000
Net cash (used in)/provided by investing activities	(24,979)	73,689
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payment on debts	—	(378)
Payment for finance lease	(28)	—
Repurchase of common stock	(25,194)	(52,606)
Common stock cash dividends paid	(15,233)	(16,112)
Proceeds from short-term debt	54,713	10,004
Net cash provided by/(used in) financing activities	14,258	(59,092)
Effect of exchange rate changes on cash and cash equivalents	(239)	257
Changes in cash, cash equivalents and restricted cash	28,123	98,189
Cash, cash equivalents and restricted cash at beginning of period	364,184	321,148
Cash, cash equivalents and restricted cash at end of period	$ 392,307	$ 419,337
CASH PAID FOR:		
Interest	$ 26	$ 505
Income taxes, net of refunds	$ 8,987	$ 16,689

The accompanying notes are an integral part of these consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
Unaudited

NOTE 1: BASIS OF PRESENTATION

These consolidated condensed financial statements include the accounts of Kulicke and Soffa Industries, Inc. and its subsidiaries (the “Company”), with appropriate elimination of intercompany balances and transactions.

The interim consolidated condensed financial statements are unaudited and, in management's opinion, include all adjustments (consisting only of normal and recurring adjustments) necessary for a fair statement of results for these interim periods. The interim consolidated condensed financial statements do not include all of the information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended September 28, 2019, filed with the Securities and Exchange Commission, which includes Consolidated Balance Sheets as of September 28, 2019 and September 29, 2018, and the related Consolidated Statements of Operations, Statements of Other Comprehensive Income, Changes in Shareholders' Equity and Cash Flows for each of the years in the three-year period ended September 28, 2019. The results of operations for any interim period are not necessarily indicative of the results of operations for any other interim period or for a full year.

Fiscal Year

Each of the Company's first three fiscal quarters end on the Saturday that is 13 weeks after the end of the immediately preceding fiscal quarter. The fourth quarter of each fiscal year ends on the Saturday closest to September 30. Fiscal 2020 quarters end on December 28, 2019, March 28, 2020, June 27, 2020 and October 3, 2020. In fiscal years consisting of 53 weeks, the fourth quarter will consist of 14 weeks. Fiscal 2019 quarters ended on December 29, 2018, March 30, 2019, June 29, 2019 and September 28, 2019.

Nature of Business

The Company designs, manufactures and sells capital equipment and tools as well as services, maintains, repairs and upgrades equipment, all used to assemble semiconductor devices. The Company's operating results depend upon the capital and operating expenditures of semiconductor device manufacturers, integrated device manufacturers, outsourced semiconductor assembly and test providers (“OSATs”), and other electronics manufacturers including automotive electronics suppliers, worldwide which, in turn, depend on the current and anticipated market demand for semiconductors and products utilizing semiconductors. The semiconductor industry is highly volatile and experiences downturns and slowdowns which can have a severe negative effect on the semiconductor industry's demand for semiconductor capital equipment, including assembly equipment manufactured and sold by the Company and, to a lesser extent, tools, including those sold by the Company. These downturns and slowdowns have in the past adversely affected the Company's operating results. The Company believes such volatility will continue to characterize the industry and the Company's operations in the future.

Use of Estimates

The preparation of consolidated condensed financial statements requires management to make assumptions, estimates and judgments that affect the reported amounts of assets and liabilities, net revenue and expenses during the reporting periods, and disclosures of contingent assets and liabilities as of the date of the consolidated condensed financial statements. On an ongoing basis, management evaluates estimates, including but not limited to, those related to accounts receivable, reserves for excess and obsolete inventory, carrying value and lives of fixed assets, goodwill and intangible assets, the valuation estimates and assessment of impairment and observable price adjustments, income taxes, equity-based compensation expense, and warranties. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable. As a result, management makes judgments regarding the carrying values of the Company's assets and liabilities that are not readily apparent from other sources. Authoritative pronouncements, historical experience and assumptions also are used as the basis for making estimates, and on an ongoing basis, management evaluates these estimates. Actual results may differ from these estimates.

Due to the Coronavirus (“COVID-19”) pandemic, there has been uncertainty and disruption in the global economy and financial markets. The Company is not aware of any specific event or circumstance that would require an update to its estimates or judgments or a revision of the carrying value of its assets or liabilities as of March 28, 2020. While there was not a material impact to our consolidated financial statements as of and for the quarter ended March 28, 2020, these estimates may change, as new events occur and additional information is obtained, as well as other factors related to COVID-19 that could result in material impacts to our consolidated financial statements in future reporting periods.

Vulnerability to Certain Concentrations

Financial instruments which may subject the Company to concentrations of credit risk as of March 28, 2020 and September 28, 2019 consisted primarily of trade receivables. The Company manages credit risk associated with investments by investing its excess cash in highly rated debt instruments of the U.S. government and its agencies, financial institutions, and corporations. The Company has established investment guidelines relative to diversification and maturities designed to maintain safety and liquidity. These guidelines are periodically reviewed and modified as appropriate. The Company does not have any exposure to sub-prime financial instruments or auction rate securities.

The Company's trade receivables result primarily from the sale of semiconductor equipment, related accessories and replacement parts, and tools to a relatively small number of large manufacturers in a highly concentrated industry. Write-offs of uncollectible accounts have historically not been significant. The Company actively monitors its customers' financial strength to reduce the risk of loss.

The Company's products are complex and require raw materials, components and subassemblies having a high degree of reliability, accuracy and performance. The Company relies on subcontractors to manufacture many of these components and subassemblies and it relies on sole source suppliers for some important components and raw material inventory.

Foreign Currency Translation and Remeasurement

The majority of the Company's business is transacted in U.S. dollars; however, the functional currencies of some of the Company's subsidiaries are their local currencies. In accordance with ASC No. 830, *Foreign Currency Matters* (“ASC 830”), for a subsidiary of the Company that has a functional currency other than the U.S. dollar, gains and losses resulting from the translation of the functional currency into U.S. dollars for financial statement presentation are not included in determining net income, but are accumulated in the cumulative translation adjustment account as a separate component of shareholders' equity (accumulated other comprehensive income / (loss)). Under ASC 830, cumulative translation adjustments are not adjusted for income taxes as they relate to indefinite investments in non-U.S. subsidiaries. Gains and losses resulting from foreign currency transactions are included in the determination of net income.

The Company's operations are exposed to changes in foreign currency exchange rates due to transactions denominated in currencies other than the location's functional currency. The Company is also exposed to foreign currency fluctuations that impact the remeasurement of net monetary assets of those operations whose functional currency, the U.S. dollar, differs from their respective local currencies, most notably in Israel, Singapore and Switzerland. In addition to net monetary remeasurement, the Company has exposures related to the translation of subsidiary financial statements from their functional currency, the local currency, into its reporting currency, the U.S. dollar, most notably in the Netherlands, China, Taiwan, Japan and Germany. The Company's U.S. operations also have foreign currency exposure due to net monetary assets denominated in currencies other than the U.S. dollar.

Derivative Financial Instruments

The Company’s primary objective for holding derivative financial instruments is to manage the fluctuation in foreign exchange rates and accordingly is not speculative in nature. The Company’s international operations are exposed to changes in foreign exchange rates as described above. The Company has established a program to monitor the forecasted transaction currency risk to protect against foreign exchange rate volatility. Generally, the Company uses foreign exchange forward contracts in these hedging programs. These instruments, which have maturities of up to twelve months, are recorded at fair value and are included in prepaid expenses and other current assets, or accrued expenses and other current liabilities.

Our accounting policy for derivative financial instruments is based on whether they meet the criteria for designation as a cash flow hedge. A designated hedge with exposure to variability in the functional currency equivalent of the future foreign currency cash flows of a forecasted transaction is referred to as a cash flow hedge. The criteria for designating a derivative as a cash flow hedge include the assessment of the instrument’s effectiveness in risk reduction, matching of the derivative instrument to its underlying transaction, and the assessment of the probability that the underlying transaction will occur. For derivatives with cash flow hedge accounting designation, we report the after-tax gain / (loss) from the effective portion of the hedge as a component of accumulated other comprehensive income / (loss) and reclassify it into earnings in the same period in which the hedged transaction affects earnings and in the same line item on the Consolidated Condensed Statement of Operations as the impact of the hedged transaction. Derivatives that we designate as cash flow hedges are classified in the Consolidated Condensed Statement of Cash Flows in the same section as the underlying item, primarily within cash flows from operating activities.

The hedge effectiveness of these derivative instruments is evaluated by comparing the cumulative change in the fair value of the hedge contract with the cumulative change in the fair value of the forecasted cash flows of the hedged item.

If a cash flow hedge is discontinued because it is no longer probable that the original hedged transaction will occur as previously anticipated, the cumulative unrealized gain or loss on the related derivative is reclassified from accumulated other comprehensive income / (loss) into earnings. Subsequent gain / (loss) on the related derivative instrument is recognized into earnings in each period until the instrument matures, is terminated, is re-designated as a qualified cash flow hedge, or is sold. Ineffective portions of cash flow hedges, as well as amounts excluded from the assessment of effectiveness, are recognized in earnings.

Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash equivalents. Cash equivalents are measured at fair value based on level one measurement, or quoted market prices, as defined by ASC No. 820, *Fair Value Measurements and Disclosures* .

Equity Investments

The Company invests in equity securities in companies to promote business and strategic objectives. Equity investments are measured and recorded as follows:

- Equity method investments are equity securities in investees that provide the Company with the ability to exercise significant influence in which it lacks a controlling financial interest. Our proportionate share of the income or loss is recognized on a one-quarter lag and is recorded as share of results of equity-method investee, net of tax.
- Non-marketable equity securities are equity securities without readily determinable fair value that are measured and recorded using a measurement alternative that measures the securities at cost minus impairment, if any, plus or minus changes resulting from qualifying observable price changes.

Allowance for Doubtful Accounts

The Company maintains allowances for doubtful accounts for estimated losses resulting from its customers' failure to make required payments. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. If global or regional economic conditions deteriorate or political conditions were to change in some of the countries where the Company does business, it could have a significant impact on the results of operations, and the Company's ability to realize the full value of its accounts receivable.

Inventories

Inventories are stated at the lower of cost (on a first-in first-out basis) or net realizable value. The Company generally provides reserves for obsolete inventory and for inventory considered to be in excess of demand. Demand is generally defined as 18 months forecasted future consumption for equipment, 24 months forecasted future consumption for spare parts, and 12 months forecasted future consumption for tools. Forecasted consumption is based upon internal projections, historical sales volumes, customer order activity and a review of consumable inventory levels at customers' facilities. The Company communicates forecasts of its future consumption to its suppliers and adjusts commitments to those suppliers accordingly. If required, the Company reserves the difference between the carrying value of its inventory and the lower of cost or net realizable value, based upon projections about future consumption, and market conditions. If actual market conditions are less favorable than projections, additional inventory reserves may be required.

Inventory reserve provision for certain subsidiaries is determined based on management's estimate of future consumption for equipment and spare parts. This estimate is based on historical sales volumes, internal projections and market developments and trends.

Property, Plant and Equipment

Property, plant and equipment are carried at cost. The cost of additions and those improvements which increase the capacity or lengthen the useful lives of assets are capitalized, while repair and maintenance costs are expensed as incurred. Depreciation and amortization are provided on a straight-line basis over the estimated useful lives as follows: buildings 25 years ; machinery, equipment, furniture and fittings 3 to 10 years ; toolings 1 year; and leasehold improvements are based on the shorter of the life of lease or life of asset . Purchased computer software costs related to business and financial systems are amortized over a five-year period on a straight-line basis. Land is not depreciated.

Valuation of Long-Lived Assets

In accordance with ASC No. 360, *Property, Plant & Equipment* ("ASC 360"), the Company's property, plant and equipment is tested for impairment based on undiscounted cash flows when triggering events occur, and if impaired, written-down to fair value based on either discounted cash flows or appraised values. ASC 360 also provides a single accounting model for long-lived assets to be disposed of by sale and establishes additional criteria that would have to be met to classify an asset as held for sale. The carrying amount of an asset or asset group is not recoverable to the extent it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group. Estimates of future cash flows used to test the recoverability of a long-lived asset or asset group must incorporate the entity's own assumptions about its use of the asset or asset group and must factor in all available evidence.

ASC 360 requires that long-lived assets be tested for recoverability whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Such events include significant under-performance relative to historical internal forecasts or projected future operating results; significant changes in the manner of use of the assets; significant negative industry or economic trends; or significant changes in market capitalization. During the three and six months ended March 28, 2020 , no "triggering" events occurred.

Accounting for Impairment of Goodwill

ASC No. 350, *Intangibles-Goodwill and Other* ("ASC 350") requires goodwill and other intangible assets with indefinite lives to be reviewed for impairment annually, or more frequently if circumstances indicate a possible impairment. We assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If, after assessing the qualitative factors, a company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying value, then performing the impairment test is unnecessary. However, if a company concludes otherwise, then it is required to perform the goodwill impairment test. Following the Company's early adoption of ASU 2017-04, *Intangibles - Goodwill and Other* (Topic 350): *Simplifying the Test for Goodwill Impairment* in the third quarter of fiscal 2017, the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment (i.e. step 2 of the goodwill impairment test) was eliminated. Accordingly, the Company's impairment test is performed by comparing the fair value of a reporting unit with its carrying value, and determining if the carrying amount exceeds its fair value.

As part of the annual evaluation, the Company performs an impairment test of its goodwill in the fourth quarter of each fiscal year to coincide with the completion of its annual forecasting and refreshing of its business outlook processes. On an ongoing basis, the Company monitors if a “triggering” event has occurred that may have the effect of reducing the fair value of a reporting unit below its respective carrying value. Adverse changes in expected operating results and/or unfavorable changes in other economic factors used to estimate fair values could result in a non-cash impairment charge in the future.

Impairment assessments inherently involve judgment as to the assumptions made about the expected future cash flows and the impact of market conditions on those assumptions. Future events and changing market conditions may impact the assumptions as to prices, costs, growth rates or other factors that may result in changes in the estimates of future cash flows. Although the Company believes the assumptions that it has used in testing for impairment are reasonable, significant changes in any one of the assumptions could produce a significantly different result. Indicators of potential impairment may lead the Company to perform interim goodwill impairment assessments, including significant and unforeseen customer losses, a significant adverse change in legal factors or in the business climate, a significant adverse action or assessment by a regulator, a significant stock price decline or unanticipated competition.

For further information on goodwill and other intangible assets, see Note 3 below.

Revenue Recognition

In accordance with ASC No. 606, *Revenue from Contracts with Customers* , the Company recognizes revenue when we satisfy performance obligations as evidenced by the transfer of control of our products or services to customers. In general, the Company generates revenue from product sales, either directly to customers or to distributors. In determining whether a contract exists, we evaluate the terms of the agreement, the relationship with the customer or distributor and their ability to pay.

The Company recognizes revenue from sales of our products, including sales to our distributors, at a point in time, generally upon shipment or delivery to the customer or distributor, depending upon the terms of the sales order. Control is considered transferred when title and risk of loss pass, when the customer becomes obligated to pay and, where applicable, when the customer has accepted the products or upon expiration of the acceptance period. For sales to distributors, payment is due on our standard commercial terms and is not contingent upon resale of the products.

Our business is subject to contingencies related to customer orders, including:

- Right of Return: A large portion of our revenue comes from the sale of equipment used in the semiconductor assembly process. Other product sales relate to consumable products, which are sold in high-volume quantities, and are generally maintained at low stock levels at customer's facility. Customer returns have historically represented a very small percentage of customer sales on an annual basis.

- Warranties: Our equipment is generally shipped with a one-year warranty against manufacturing defects. We establish reserves for estimated warranty expense when revenue for the related equipment is recognized. The reserve for estimated warranty expense is based upon historical experience and management's estimate of future expenses, including product parts replacement, freight charges and labor costs expected to be incurred to correct product failures during the warranty period.
- Conditions of Acceptance: Sales of our consumable products generally do not have customer acceptance terms. In certain cases, sales of our equipment have customer acceptance clauses which may require the equipment to perform in accordance with customer specifications or when installed at the customer's facility. In such cases, if the terms of acceptance are satisfied at our facility prior to shipment, the revenue for the equipment will be recognized upon shipment. If the terms of acceptance are satisfied at our customers' facilities, the revenue for the equipment will not be recognized until acceptance, which is typically obtained after installation and testing, is received from the customer.

Service revenue is generally recognized over time as the services are performed. For the three and six months ended March 28, 2020 , and March 30, 2019 , the service revenue is not material.

The Company measures revenue based on the amount of consideration we expect to be entitled to in exchange for products or services. Any variable consideration such as sales incentives are recognized as a reduction of net revenue at the time of revenue recognition.

The length of time between invoicing and payment is not significant under our payment terms. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined our contracts generally do not include a significant financing component.

Shipping and handling costs billed to customers are recognized in net revenue. Shipping and handling costs paid by the Company are included in cost of sales.

Research and Development

The Company charges research and development costs associated with the development of new products to expense when incurred. In certain circumstances, pre-production machines that the Company intends to sell are carried as inventory until sold.

Income Taxes

In accordance with ASC No. 740, *Income Taxes* , deferred income taxes are determined using the balance sheet method. The Company records a valuation allowance to reduce its deferred tax assets to the amount expected, on a more likely than not basis, to be realized. While the Company has considered future taxable income and ongoing tax planning strategies in assessing the need for the valuation allowance, if it were to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to deferred tax assets would increase income in the period when such determination is made. Likewise, should the Company determine it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to deferred tax assets would decrease income in the period when such determination is made.

The Company determines the amount of unrecognized tax benefit with respect to uncertain tax positions taken or expected to be taken on its income tax returns in accordance with ASC No. 740 Topic 10, *Income Taxes, General* (“ASC 740.10”). Under ASC 740.10, the Company utilizes a two-step approach for evaluating uncertain tax positions. Step one, or recognition, requires a company to determine if the weight of available evidence indicates a tax position is more likely than not to be sustained upon examination solely based on its technical merit. Step two, or measurement, is based on the largest amount of benefit, which is more likely than not to be realized on settlement with the taxing authority, including resolution of related appeals or litigation processes, if any.

Equity-Based Compensation

The Company accounts for equity-based compensation under the provisions of ASC No. 718, *Compensation - Stock Compensation* (“ASC 718”). ASC 718 requires the recognition of the fair value of the equity-based compensation in net income. Compensation expense associated with Relative TSR Performance Share Units is determined using a Monte-Carlo valuation model, and compensation expense associated with time-based and Special/Growth Performance Share Units is determined based on the number of shares granted and the fair value on the date of grant. See Note 10 for a summary of the terms of these performance-based awards. The fair value of the Company's stock option awards is estimated using a Black-Scholes option valuation model. The fair value of equity-based awards is amortized over the vesting period of the award and the Company elected to use the straight-line method for awards granted after the adoption of ASC 718.

Earnings per Share

Earnings per share ("EPS") are calculated in accordance with ASC No. 260, *Earnings per Share* . Basic EPS include only the weighted average number of common shares outstanding during the period. Diluted EPS include the weighted average number of common shares and the dilutive effect of stock options, restricted stock awards, performance share units and restricted share units outstanding during the period, when such instruments are dilutive.

Accounting for Business Acquisitions

The Company accounts for business acquisitions in accordance with ASC No. 805, *Business Combinations* . The fair value of the net assets acquired and the results of operations of the acquired businesses are included in the Unaudited Consolidated Condensed Financial Statements from the acquisition date forward. The Company is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and results of operations during the reporting period. Estimates are used in accounting for, among other things, the fair value of acquired net operating assets, property, plant and equipment, deferred revenue, intangible assets and related deferred income taxes, useful lives of property, plant and equipment, and amortizable lives of acquired intangible assets. Any excess of the purchase consideration over the identified fair value of the assets and liabilities acquired is recognized as goodwill. The valuation of these tangible and identifiable intangible assets and liabilities is subject to further management review and may change materially between the preliminary allocation and end of the purchase price allocation period.

Restructuring Charges

Restructuring charges may consist of voluntary or involuntary severance-related charges, asset-related charges and other costs due to exit activities. We recognize voluntary termination benefits when an employee accepts the offered benefit arrangement. We recognize involuntary severance-related charges depending on whether the termination benefits are provided under an ongoing benefit arrangement or under a one-time benefit arrangement. If the former, we recognize the charges once they are probable and the amounts are estimable. If the latter, we recognize the charges once the benefits have been communicated to employees.

Recent Accounting Pronouncements

Leases

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842), which requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under current GAAP.

Subsequently in July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements* , provides additional information concerning the new leases standard in ASU 2016-02, *Leases* (Topic 842). The targeted improvements provide entities with additional and optional transition methods.

In November 2018, the FASB issued ASU 2018-20, *Leases* (Topic 842): *Narrow-Scope Improvements for Lessors* . This ASU provides guidance in several areas, including the accounting policy election for sales taxes and other similar taxes collected from lessees, accounting for certain lessor costs and accounting for variable payments for contracts with lease and nonlease components.

We adopted these ASUs utilizing the modified retrospective transition method through a cumulative-effect adjustment at the beginning of the first quarter of fiscal 2020. In addition, we elected the package of practical expedients permitted under the transition guidance that allowed us to apply prior conclusions related to lease definition, classification and initial direct costs. Additionally, the lease previously identified as build-to-suit leasing arrangement under legacy lease accounting (ASC 840), was derecognized pursuant to the transition guidance provided for build-to-suit leases in ASC 842 (see Note 9 below). Accordingly, the lease has been reassessed as an operating lease as of the adoption date under ASC 842, and is included on the Consolidated Condensed Balance Sheets. The adoption of these ASUs has resulted in an increase of approximately $23.8 million in operating lease liabilities and $22.2 million in right-of-use assets, decrease of approximately $14.5 million in financing obligation, decrease of approximately $15.3 million in property, plant and equipment, and an adjustment of $0.8 million to retained earnings after income tax effects on our Consolidated Condensed Balance Sheets.

Financial Instruments

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses* (Topic 326): Measurement of Credit Losses on Financial Instruments. This ASU replaces the impairment methodology in current GAAP, which delays recognition of credit losses until it is probable a loss has been incurred, with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This ASU will be effective for us beginning in our first quarter of fiscal 2021. We are currently evaluating the impact of the adoption of this ASU on our consolidated condensed financial statements.

KULICKE AND SOFFA INDUSTRIES, INC.
NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
Unaudited (continued)

Derivatives and Hedging

In August 2017, the FASB issued ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities* (Topic 815). The new guidance expands and refines hedge accounting for both financial and non-financial risks. The new guidance also modifies disclosure requirements for hedging activities. We adopted this ASU as of the beginning of the first quarter of 2020. The adoption of this ASU did not have a material impact on our consolidated condensed financial statements.

Collaborative Arrangements

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements* (Topic 808). This ASU clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. This ASU will be effective for us in the first quarter of 2021 with early adoption permitted. This ASU requires retrospective adoption to the date we adopted ASC 606 by recognizing a cumulative-effect adjustment to the opening balance of retained earnings of the earliest annual period presented. We are currently evaluating the timing and the effects of the adoption of this ASU on our consolidated condensed financial statements.

Income Taxes

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects From Accumulated Other Comprehensive Income* , which allows for a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the U.S. Tax Cuts and Jobs Act (the "TCJA") and requires entities to provide certain disclosures regarding these stranded tax effects, if any. We adopted this ASU in the first quarter of 2020. The adoption did not have a material impact on our consolidated condensed financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes* (Topic 740). The amendments in this ASU simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740 and clarify and amend existing guidance. This ASU will be effective for us in the first quarter of 2022 with early adoption permitted. We are currently evaluating the timing and the effects of the adoption of this ASU on our consolidated condensed financial statements.

NOTE 2: BALANCE SHEET COMPONENTS

The following tables reflect the components of significant balance sheet accounts as of March 28, 2020 and September 28, 2019 :

	As of	
(in thousands)	March 28, 2020	September 28, 2019
Short-term investments, available-for-sale [1]	$ 248,000	$ 229,000
Inventories, net:		
Raw materials and supplies	$ 60,181	$ 52,853
Work in process	33,798	32,026
Finished goods	42,764	33,742
	136,743	118,621
Inventory reserves	(30,565)	(29,313)
	$ 106,178	$ 89,308
Property, plant and equipment, net:		
Land	$ 2,182	$ 2,182
Buildings and building improvements	22,284	41,961
Leasehold improvements	22,712	24,441
Data processing equipment and software	37,082	36,302
Machinery, equipment, furniture and fixtures	73,957	71,465
Construction in progress	7,082	6,512
	165,299	182,863
Accumulated depreciation	(109,652)	(110,493)
	$ 55,647	$ 72,370
Accrued expenses and other current liabilities:		
Accrued customer obligations [2]	$ 33,766	$ 26,292
Wages and benefits	23,419	18,188
Dividend payable	7,557	7,582
Commissions and professional fees	2,606	2,024
Deferred rent	—	1,721
Severance	880	1,500
Other	10,068	7,226
	$ 78,296	$ 64,533

(1)All short-term investments were classified as available-for-sale and were measured at fair value based on level one measurement, or quoted market prices, as defined by ASC 820. The Company did not recognize any realized gains or losses on the sale of investments during the three and six months ended March 28, 2020 and March 30, 2019 .

(2)Represents customer advance payments, customer credit program, accrued warranty expense and accrued retrofit obligations.

NOTE 3: GOODWILL AND INTANGIBLE ASSETS

Goodwill

Intangible assets classified as goodwill are not amortized. The goodwill established in connection with our acquisitions represents the estimated future economic benefits arising from the assets we acquired that did not qualify to be identified and recognized individually. The goodwill also includes the value of expected future cash flows from the acquisitions, expected synergies with our other affiliates and other unidentifiable intangible assets. The Company performs an annual impairment test of its goodwill during the fourth quarter of each fiscal year, which coincides with the completion of its annual forecasting and refreshing of business outlook process.

The Company performed its annual impairment test in the fourth quarter of fiscal 2019 and concluded that no impairment charge was required. Any future adverse changes in expected operating results and/or unfavorable changes in other economic factors used to estimate fair values could result in a noncash impairment in the future.

During the three and six months ended March 28, 2020 , the Company reviewed qualitative factors to ascertain if a "triggering" event may have taken place that may have the effect of reducing the fair value of the reporting unit below its carrying value and concluded that no triggering event had occurred. While we have concluded that a triggering event did not occur during the quarter ended March 28, 2020, a prolonged COVID-19 pandemic could impact the results of operations due to changes to assumptions utilized in the determination of the estimated fair values of the reporting units that could be significant enough to trigger an impairment. Net sales and earnings growth rates could be negatively impacted by reductions or changes in demand for our products. The discount rate utilized in our valuation model could also be impacted by changes in the underlying interest rates and risk premiums included in the determination of the cost of capital.

The following table summarizes the Company's recorded goodwill by reporting segments as of March 28, 2020 and September 28, 2019 :

	As of	
(in thousands)	March 28, 2020	September 28, 2019
Capital Equipment	$ 29,681	$ 29,480
Aftermarket Products and Services ("APS")	26,265	26,211
Total goodwill	$ 55,946	$ 55,691

Intangible Assets

Intangible assets with determinable lives are amortized over their estimated useful lives. The Company's intangible assets consist primarily of developed technology, customer relationships and trade and brand names.

The following table reflects net intangible assets as of March 28, 2020 and September 28, 2019 :

	As of		Average estimated
(dollar amounts in thousands)	March 28, 2020	September 28, 2019	useful lives *(in years)*
Developed technology	$ 88,184	$ 87,209	7.0 to 15.0
Accumulated amortization	(51,124)	(48,718)	
Net developed technology	$ 37,060	$ 38,491	
Customer relationships	$ 35,466	$ 35,180	5.0 to 6.0
Accumulated amortization	(33,435)	(31,862)	
Net customer relationships	$ 2,031	$ 3,318	
Trade and brand names	$ 7,265	$ 7,219	7.0 to 8.0
Accumulated amortization	(6,599)	(6,377)	
Net trade and brand names	$ 666	$ 842	
Other intangible assets	$ 2,500	$ 2,500	1.9
Accumulated amortization	(2,500)	(2,500)	
Net other intangible assets	$ —	$ —	
Net intangible assets	$ 39,757	$ 42,651	

The following table reflects estimated annual amortization expense related to intangible assets as of March 28, 2020 :

(in thousands)	As of March 28, 2020
Remaining fiscal 2020	$ 3,663
Fiscal 2021	5,306
Fiscal 2022	4,348
Fiscal 2023	4,252
Fiscal 2024	4,252
Thereafter	17,936
Total amortization expense	$ 39,757

NOTE 4: CASH, CASH EQUIVALENTS, AND SHORT-TERM INVESTMENTS

Cash equivalents consist of instruments with remaining maturities of three months or less at the date of purchase. In general, these investments are free of trading restrictions.

Cash, cash equivalents, and short-term investments consisted of the following as of March 28, 2020 :

(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Current assets:				
Cash	$ 225,849	$ —	$ —	$ 225,849
Cash equivalents:				
Money market funds (1)	166,451	—	—	166,451
Time deposits (2)	7	—	—	7
Total cash and cash equivalents	$ 392,307	$ —	$ —	$ 392,307
Short-term investments (2) :				
Time deposits	149,000	—	—	149,000
Deposits (3)	99,000	—	—	99,000
Total short-term investments	$ 248,000	$ —	$ —	$ 248,000
Total cash, cash equivalents, and short-term investments	$ 640,307	$ —	$ —	$ 640,307

(1)The fair value was determined using unadjusted prices in active, accessible markets for identical assets, and as such they were classified as Level 1 assets in the fair value hierarchy.
(2)Fair value approximates cost basis.
(3)Represents deposits that require a notice period of three months for withdrawal.

Cash, cash equivalents, restricted cash and short-term investments consisted of the following as of September 28, 2019 :

(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Current assets:				
Cash	$ 201,005	$ —	$ —	$ 201,005
Cash equivalents:				
Money market funds [1]	163,172	—	—	163,172
Time deposits [2]	7	—	—	7
Total cash and cash equivalents	$ 364,184	$ —	$ —	$ 364,184
Short-term investments [2] :				
Time deposits	130,000	—	—	130,000
Deposits [3]	99,000	—	—	99,000
Total short-term investments	$ 229,000	$ —	$ —	$ 229,000
Total cash, cash equivalents, restricted cash and short-term investments	$ 593,184	$ —	$ —	$ 593,184

(1)The fair value was determined using unadjusted prices in active, accessible markets for identical assets, and as such they were classified as Level 1 assets in the fair value hierarchy.
(2)Fair value approximates cost basis.
(3)Represents deposits that require a notice period of three months for withdrawal.

NOTE 5: EQUITY INVESTMENTS

Equity investments consisted of the following as of March 28, 2020 and September 28, 2019 :

	As of	
(in thousands)	March 28, 2020	September 28, 2019
Non-marketable equity securities [1]	$ 6,278	$ 5,000
Equity method investments	1,149	1,250
Total equity investments	$ 7,427	$ 6,250

(1) On January 30, 2019, the Company made a $5.0 million investment in one of our collaborative partners, over which the Company does not have significant influence. During the three and six months ended March 28, 2020 , there was no impairment or adjustment to the observable price.

NOTE 6: FAIR VALUE MEASUREMENTS

Accounting standards establish three levels of inputs that may be used to measure fair value: quoted prices in active markets for identical assets or liabilities (referred to as Level 1), inputs other than Level 1 that are observable for the asset or liability either directly or indirectly (referred to as Level 2) and unobservable inputs to the valuation methodology that are significant to the measurement of fair value of assets or liabilities (referred to as Level 3).

Assets and Liabilities Measured and Recorded at Fair Value on a Recurring Basis

We measure certain financial assets and liabilities at fair value on a recurring basis. There were no transfers between fair value measurement levels during the three and six months ended March 28, 2020 .

Fair Value Measurements on a Nonrecurring Basis

Our non-financial assets such as intangible assets and property, plant and equipment are carried at cost unless impairment is deemed to have occurred. Our equity method investments are recorded at fair value only if an impairment is recognized.

Fair Value of Financial Instruments

Amounts reported as accounts receivables, prepaid expenses and other current assets, accounts payable and accrued expenses approximate fair value.

NOTE 7: DERIVATIVE FINANCIAL INSTRUMENTS

The Company's international operations are exposed to changes in foreign exchange rates due to transactions denominated in currencies other than U.S. dollars. Most of the Company's revenue and cost of materials are transacted in U.S. dollars. However, a significant amount of the Company's operating expenses is denominated in local currencies, primarily in Singapore.

The foreign currency exposure of our operating expenses is generally hedged with foreign exchange forward contracts. The Company's foreign exchange risk management programs include using foreign exchange forward contracts with cash flow hedge accounting designation to hedge exposures to the variability in the U.S. dollar equivalent of forecasted non-U.S. dollar-denominated operating expenses. These instruments generally mature within twelve months . For these derivatives, we report the after-tax gain or loss from the effective portion of the hedge as a component of accumulated other comprehensive income (loss), and we reclassify it into earnings in the same period or periods in which the hedged transaction affects earnings and in the same line item on the Consolidated Condensed Statements of Operations as the impact of the hedged transaction.

The fair value of derivative instruments on our Consolidated Condensed Balance Sheet as of March 28, 2020 and September 28, 2019 was as follows:

	As of			
	March 28, 2020		September 28, 2019	
(in thousands)	Notional Amount	Fair Value (Liability) Derivatives (1)	Notional Amount	Fair Value (Liability) Derivatives (1)
Derivatives designated as hedging instruments:				
Foreign exchange forward contracts (2)	$ 32,818	$ (1,702)	$ 33,834	$ (597)
Total derivatives	$ 32,818	$ (1,702)	$ 33,834	$ (597)

(1) The fair value of derivative liabilities is measured using level 2 fair value inputs and is included in accrued expenses and other current liabilities on our Consolidated Condensed Balance Sheet.
(2) Hedged amounts expected to be recognized to income within the next twelve months .

The effects of derivative instruments designated as cash flow hedges in our Consolidated Condensed Statements of Comprehensive Income for the three and six months ended March 28, 2020 and March 30, 2019 are as follows:

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Foreign exchange forward contract in cash flow hedging relationships:				
Net (loss)/gain recognized in OCI, net of tax (1)	$ (1,981)	$ 161	$ (1,374)	$ 88
Net loss reclassified from accumulated OCI into income, net of tax (2)	$ (72)	$ (267)	$ (269)	$ (1,132)

(1) Net change in the fair value of the effective portion classified in other comprehensive income ("OCI").
(2) Effective portion classified as selling, general and administrative expense.

NOTE 8: LEASES

We have entered into various non-cancellable operating and finance lease agreements for certain of our offices, manufacturing, technology, sales support and service centers, equipment, and vehicles. We determine if an arrangement is a lease, or contains a lease, at inception and record the leases in our financial statements upon lease commencement, which is the date when the underlying asset is made available for use by the lessor. Our lease terms may include one or more options to extend the lease terms, for periods from one year to 20 years , when it is reasonably certain that we will exercise that option. As of March 28, 2020 , one option to extend the lease was recognized as a right-of-use ("ROU") asset, and a lease liability. We have lease agreements with lease and non-lease components, and non-lease components are accounted for separately and not included in our leased assets and corresponding liabilities. We have elected not to present short-term leases on the Consolidated Condensed Balance Sheet as these leases have a lease term of 12 months or less at lease inception.

Operating leases are included in operating ROU assets, current operating lease liabilities and non current operating lease liabilities, and finance leases are in included in property, plant and equipment, accrued expenses and other current liabilities, and other liabilities on the Consolidated Condensed Balance Sheet. As of March 28, 2020 , our finance leases are not material.

The following table shows the components of lease expense:

	Three months ended	Six months ended
(in thousands)	March 28, 2020	March 28, 2020
Operating lease expense [(1)]	$ (1,668)	$ (3,384)

(1) Operating lease expense includes short-term lease expense, which is immaterial for the three and six months ended March 28, 2020 .

The following table shows the cash flows arising from lease transactions. Cash payments related to short-term leases are not included in the measurement of operating and finance lease liabilities, and, as such, are excluded from the amounts below:

	Six months ended
(in thousands)	March 28, 2020
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash outflows from operating leases	$ 3,131

The following table shows the weighted-average lease terms and discount rates for operating leases:

	As of
	March 28, 2020
Operating leases:	
Weighted-average remaining lease term *(in years)* :	4.9
Weighted-average discount rate:	4.5%

Future lease payments, excluding short-term leases, as of March 28, 2020 , are detailed as follows:

(in thousands)	Operating leases
Remainder of 2020	$ 3,776
2021	5,810
2022	5,299
2023	5,194
2024	2,944
Thereafter	3,639
Total minimum lease payments	26,662
Less: Interest	2,876
Present value of lease obligations	23,786
Less: Current portion	5,236
Long-term portion of lease obligations	$ 18,550

Future lease payments under operating leases prior to adoption ASC 842 were as follows:

		Payments due by fiscal year					
(in thousands)	Total	2020	2021	2022	2023	2024	Thereafter
Operating lease obligations [(1)]	$ 16,273	$ 4,089	$ 2,576	$ 2,182	$ 1,967	$ 1,822	$ 3,637

(1) Pursuant to ASC No. 840, *Leases* ("ASC 840") , for lessee's involvement in asset construction, the Company was considered to be the owner of the Building (as defined in Note 9 below) during the construction phase due to its involvement in the asset construction. As a result of the Company's continued involvement during the lease term, the Company did not fulfill the criteria to apply sale-leaseback accounting under ASC 840. Therefore, at completion of construction, the Building remained on the Consolidated Condensed Balance Sheet, and the corresponding financing obligation was reclassified to long-term liability. As of September 28, 2019, we recorded a financing obligation related to the Building of $15.0 million (see Note 9 below). The financing obligation is not reflected in the table above.

NOTE 9: DEBT AND OTHER OBLIGATIONS

Financing Obligation

On December 1, 2013, Kulicke & Soffa Pte Ltd. ("Pte"), the Company's wholly owned subsidiary, signed a lease with DBS Trustee Limited as trustee of Mapletree Industrial Trust (the "Landlord") to lease from the Landlord approximately 198,000 square feet, representing approximately 70% of a building in Singapore as our corporate headquarters, as well as a manufacturing, technology, sales and service center (the "Building"). The lease has a 10 -year non-cancellable term (the "Initial Term") and contains options to renew for two further 10 -year terms. The annual rent and service charge for the Initial Term range from $4 million to $5 million Singapore dollars.

Pursuant to legacy ASC No. 840, *Leases* ("ASC 840"), we have classified the Building (build-to-suit leasing arrangement) on our Consolidated Condensed Balance Sheet as property, plant and equipment, which we are depreciating over its estimated useful life of 25 years . We concluded that the term of the financing obligation is 10 years . This is equal to the non-cancellable term of our lease agreement with the Landlord. At the inception of the lease, the asset and financing obligation recorded on the Consolidated Condensed Balance Sheet was $20.0 million , which was based on an interest rate of 6.3% over the Initial Term. As of September 28, 2019 , the financing obligation related to the Building was $15.0 million , which approximates fair value (Level 2). The financing obligation will be settled through a combination of periodic cash rental payments and the return of the leased property at the expiration of the lease. We do not report rent expense for the property, which is deemed owned for accounting purposes. Rather, rental payments required under the lease are considered debt service and applied to the deemed landlord financing obligation and interest expense. The Building and financing obligation are being amortized in a manner that will not generate a gain or loss upon lease termination.

The build-to-suit leasing arrangement was derecognized pursuant to the transition guidance provided in ASC 842, which was effective beginning with the first quarter of 2020. Accordingly, the lease has been reassessed as an operating lease as of the adoption date under ASC 842, and is included on the Consolidated Condensed Balance Sheet. The adoption has resulted in a decrease of approximately $14.5 million in financing obligation, decrease of approximately $15.3 million in property, plant and equipment, and an adjustment of $0.8 million to retained earnings after income tax effects on our Consolidated Condensed Balance Sheet.

Bank Guarantees

On November 22, 2013, the Company obtained a $5.0 million credit facility with Citibank in connection with the issuance of bank guarantees for operational purposes. As of March 28, 2020 , the outstanding amount under this facility was $3.5 million .

Credit Facilities

On February 15, 2019, the Company entered into a Facility Letter and Overdraft Agreement (collectively, the "Facility Agreements") with MUFG Bank, Ltd., Singapore Branch (the "Bank"). The Facility Agreements provide the Company with an overdraft facility of up to $150.0 million (the "Overdraft Facility") for general corporate purposes. Amounts outstanding under the Overdraft Facility, including interest, are payable upon thirty days written demand by the Bank. Interest on the Overdraft Facility is calculated on a daily basis, and the applicable interest rate is calculated at the overnight U.S. Dollar LIBOR rate plus a margin of 1.5% per annum. The Overdraft Facility is an unsecured facility per the terms of the Facility Agreements. The Facility Agreements contain customary non-financial covenants, including, without limitation, covenants that restrict the Company's ability to sell or dispose of its assets, cease owning at least 51% of one of its subsidiaries (the "Subsidiary"), or encumber its assets with material security interests (including any pledge of monies in the Subsidiary's cash deposit account with the Bank). The Facility Agreements also contain typical events of default, including, without limitation, non-payment of financial obligations when due, cross defaults to other material indebtedness of the Company or any breach of a representation or warranty under the Facility Agreements. As of March 28, 2020 , the outstanding amount under the Facility Agreements was $115.6 million .

NOTE 10: SHAREHOLDERS' EQUITY AND EMPLOYEE BENEFIT PLANS

Common Stock and 401(k) Retirement Plan

The Company has a 401(k) retirement plan (the "Plan") for eligible U.S. employees. The Plan allows for employee contributions and matching Company contributions from 4% to 6% based upon terms and conditions of the 401(k) Plan.

The following table reflects the Company's contributions to the Plan during the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Cash	$ 352	$ 369	$ 709	$ 863

Stock Repurchase Program

On August 15, 2017, the Company's Board of Directors authorized a program (the "Program") to repurchase up to $100 million of the Company's common stock on or before August 1, 2020. On July 10, 2018, the Board of Directors increased the share repurchase authorization under the Program to $200 million . On January 31, 2019, the Board of Directors further increased the share repurchase authorization under the Program to $300 million . The Company has entered into a written trading plan under Rule 10b5-1 of the Exchange Act to facilitate repurchases under the Program. The Program may be suspended or discontinued at any time and is funded using the Company's available cash, cash equivalents and short-term investments. Under the Program, shares may be repurchased through open market and/or privately negotiated transactions at prices deemed appropriate by management. The timing and amount of repurchase transactions under the Program depend on market conditions as well as corporate and regulatory considerations. During the three and six months ended March 28, 2020 , the Company repurchased a total of 0.9 million and 1.1 million shares of common stock under the Program at a cost of $18.5 million and $23.9 million , respectively. The stock repurchases were recorded in the periods they were delivered and accounted for as treasury stock in the Company's Consolidated Condensed Balance Sheet. The Company records treasury stock purchases under the cost method using the first-in, first-out (FIFO) method. Upon reissuance of treasury stock, amounts in excess of the acquisition cost are credited to additional paid-in capital. If the Company reissues treasury stock at an amount below its acquisition cost and additional paid-in capital associated with prior treasury stock transactions is insufficient to cover the difference between acquisition cost and the reissue price, this difference is recorded against retained earnings. As of March 28, 2020 , our remaining stock repurchase authorization under the Program was approximately $73.3 million .

Dividends

On February 20, 2020 and December 12, 2019, the Board of Directors declared a quarterly dividend of $0.12 per share of common stock. Dividends paid during the three and six months ended March 28, 2020 totaled $7.7 million and $15.2 million , respectively. The declaration of any future cash dividend is at the discretion of the Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements, business conditions and other factors, as well as a determination that such dividends are in the best interests of the Company's shareholders.

Accumulated Other Comprehensive Income

The following table reflects accumulated other comprehensive loss reflected on the Consolidated Condensed Balance Sheets as of March 28, 2020 and September 28, 2019 :

	As of	
(in thousands)	March 28, 2020	September 28, 2019
Loss from foreign currency translation adjustments	$ (6,066)	$ (7,745)
Unrecognized actuarial loss on pension plan, net of tax	(1,664)	(1,598)
Unrealized loss on hedging	(1,702)	(597)
Accumulated other comprehensive loss	$ (9,432)	$ (9,940)

Equity-Based Compensation

The Company has stockholder-approved equity-based employee compensation plans (the "Employee Plans") and director compensation plans (the "Director Plans") (collectively, the "Equity Plans"). As of March 28, 2020 , 3.4 million shares of common stock are available for grant to its employees and directors under the 2017 Equity Plan, including previously registered shares that have been carried forward for issuance from the 2009 Equity Plan.

- Relative TSR Performance Share Units ("Relative TSR PSUs") entitle the employee to receive common shares of the Company on the award vesting date, if market performance objectives that measure relative total shareholder return (“TSR”) are attained. Relative TSR is calculated based upon the 90 -calendar day average price of the Company's stock as compared to specific peer companies that comprise the GICS (45301020) Semiconductor Index. TSR is measured for the Company and each peer company over a performance period, which is generally three years . Vesting percentages range from 0% to 200% of awards granted. The provisions of the Relative TSR PSUs are reflected in the grant date fair value of the award; therefore, compensation expense is recognized regardless of whether the market condition is ultimately satisfied. Compensation expense is reversed if the award is forfeited prior to the vesting date.
- In general, stock options and Time-based Restricted Share Units ("Time-based RSUs") awarded to employees vest annually over a three-year period provided the employee remains employed by the Company. The Company follows the non-substantive vesting method for stock options and recognizes compensation expense immediately for awards granted to retirement eligible employees, or over the period from the grant date to the date retirement eligibility is achieved.
- Special/Growth Performance Share Units (“Special/Growth PSUs”) entitle the employee to receive common shares of the Company on the three-year anniversary of the grant date (if employed by the Company) if revenue growth targets set by the Management Development and Compensation Committee (“MDCC”) of the Board of Directors on the date of grant are met. If revenue growth targets are not met, the Special/Growth PSUs do not vest. Certain Special/Growth PSUs vest based on achievement of strategic goals over a certain time period or periods set by the MDCC. If the strategic goals are not achieved, the Special/Growth PSUs do not vest.

Equity-based compensation expense recognized in the Consolidated Condensed Statements of Operations for the three and six months ended March 28, 2020 and March 30, 2019 was based upon awards ultimately expected to vest, with forfeitures accounted for when they occur.

The following table reflects Time-based RSUs, Relative TSR PSUs, Special/Growth PSUs and common stock granted during the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(shares in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Time-based RSUs	2	12	477	519
Relative TSR PSUs	1	8	158	165
Special/Growth PSUs	—	3	73	55
Common stock	8	10	17	18
Equity-based compensation in shares	11	33	725	757

The following table reflects total equity-based compensation expense, which includes Time-based RSUs, Relative TSR PSUs, Special/Growth PSUs and common stock, included in the Consolidated Condensed Statements of Operations during the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Cost of sales	$ 183	$ 160	$ 415	$ 310
Selling, general and administrative	2,695	2,330	5,430	5,255
Research and development	844	811	1,486	1,609
Total equity-based compensation expense	$ 3,722	$ 3,301	$ 7,331	$ 7,174

The following table reflects equity-based compensation expense, by type of award, for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Time-based RSUs	$ 2,349	$ 2,131	$ 4,764	$ 4,272
Relative TSR PSUs	896	818	1,302	2,193
Special/Growth PSUs	255	157	821	319
Common stock	222	195	444	390
Total equity-based compensation expense	$ 3,722	$ 3,301	$ 7,331	$ 7,174

NOTE 11: REVENUE AND CONTRACT LIABILITIES

The Company recognizes revenue when we satisfy performance obligations as evidenced by the transfer of control of our products or services to customers. In general, the Company generates revenue from product sales, either directly to customers or to distributors. In determining whether a contract exists, we evaluate the terms of the agreement, the relationship with the customer or distributor and their ability to pay. Service revenue is generally recognized over time as the services are performed. For the three and six months ended March 28, 2020 , and March 30, 2019 , the service revenue is not material. Please refer to Note 1: Basis of Presentation- *Revenue Recognition* , for disclosure on the Company's revenue recognition, and Note 14: Segment information for disclosure of revenue by reportable segment and disaggregated revenue.

Contract Liabilities

Our contract liabilities are primarily related to advance payments received from customers to secure product in future periods where we have received amounts in advance of satisfying performance obligations and are reported in the accompanying Consolidated Condensed Balance Sheets within accrued expenses and other current liabilities.

Contract liabilities increase as a result of receiving new advance payments from customers and decrease as revenue is recognized from customers purchasing product under advance payment arrangements upon meeting the performance obligations.

The following table shows the changes in contract liability balances during the three and six months ended March 28, 2020 and March 30, 2019:

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Contract liabilities, beginning of period	$ 2,588	$ 548	$ 1,896	$ 997
Revenue recognized	(2,459)	(2,339)	(5,817)	(5,517)
Additions	10,229	2,372	14,279	5,101
Contract liabilities, end of period	$ 10,358	$ 581	$ 10,358	$ 581

NOTE 12: EARNINGS PER SHARE

Basic income per share is calculated using the weighted average number of shares of common stock outstanding during the period. Stock options and restricted stock are included in the calculation of diluted earnings per share, except when their effect would be anti-dilutive. For the three months ended March 30, 2019, 0.8 million shares of restricted stock units and stock options were excluded due to the Company's net loss.

The following tables reflect a reconciliation of the shares used in the basic and diluted net income per share computation for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(in thousands, except per share data)	March 28, 2020		March 30, 2019	
	Basic	Diluted	Basic	Diluted
NUMERATOR:				
Net income/(loss)	$ 11,888	$ 11,888	$ (3,555)	$ (3,555)
DENOMINATOR:				
Weighted average shares outstanding - Basic	63,679	63,679	65,930	65,930
Dilutive effect of Equity Plans		540		—
Weighted average shares outstanding - Diluted		64,219		65,930
EPS:				
Net income/(loss) per share - Basic	$ 0.19	$ 0.19	$ (0.05)	$ (0.05)
Effect of dilutive shares		—		—
Net income/(loss) per share - Diluted		$ 0.19		$ (0.05)

	Six months ended			
(in thousands, except per share data)	March 28, 2020		March 30, 2019	
	Basic	Diluted	Basic	Diluted
NUMERATOR:				
Net income	$ 25,365	$ 25,365	$ 3,962	$ 3,962
DENOMINATOR:				
Weighted average shares outstanding - Basic	63,675	63,675	66,530	66,530
Dilutive effect of Equity Plans		591		814
Weighted average shares outstanding - Diluted		64,266		67,344
EPS:				
Net income per share - Basic	$ 0.40	$ 0.40	$ 0.06	$ 0.06
Effect of dilutive shares		(0.01)		—
Net income per share - Diluted		$ 0.39		$ 0.06

NOTE 13: INCOME TAXES

The following table reflects the provision for income taxes and the effective tax rate for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Provision for income taxes	$ 1,162	$ 4,672	$ 3,295	$ 15,242
Effective tax rate	8.9%	407.7%	11.5%	79.1%

The decrease in provision for income taxes and in effective tax rate for the three months ended March 28, 2020 as compared to the three months ended March 30, 2019 is primarily related to $2.5 million of provision for income taxes recorded in the second quarter of fiscal 2019 as an adjustment to the U.S. one-time transition tax. The decrease in provision for income taxes and in effective rate for the six months ended March 28, 2020 as compared to the six months ended March 30, 2019 is primarily related to $10.2 million of provision for income taxes recorded in the first and second quarter of fiscal 2019 as an adjustment to the U.S. one-time transition tax.

For the six months ended March 28, 2020 , the effective tax rate is lower than the U.S. federal statutory tax rate primarily due to tax benefits from foreign income earned in lower tax jurisdictions, tax incentives, and tax credits, partially offset by the foreign minimum tax, deemed dividends, valuation allowances recorded against certain loss carryforwards, foreign withholding taxes, and tax liabilities from foreign operations.

It is reasonably possible that the amount of the unrecognized tax benefit with respect to certain unrecognized tax positions will increase or decrease during the next 12 months due to the expected lapse of statutes of limitation and / or settlements of tax examinations. Given the number of years and numerous matters that remain subject to examination in various tax jurisdictions, we cannot practicably estimate the timing or financial outcomes of these examinations.

NOTE 14: SEGMENT INFORMATION

Reportable segments are defined as components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and to assess performance. The Company's Chief Executive Officer is the Company's chief operating decision maker. The chief operating decision maker does not review discrete asset information. The Company operates two reportable segments consisting of: (i) Capital Equipment; and (ii) Aftermarket Products and Services ("APS").

The following table reflects operating information by segment for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Net revenue:				
Capital Equipment	$ 113,222	$ 80,567	$ 215,546	$ 196,505
APS	37,519	35,341	79,492	76,611
Net revenue	150,741	115,908	295,038	273,116
Income/(loss) from operations:				
Capital Equipment	4,062	(9,244)	6,770	(4,114)
APS	7,014	6,779	17,720	16,204
Income/(loss) from operations	$ 11,076	$ (2,465)	$ 24,490	$ 12,090

The following table reflects net revenue by Capital Equipment end markets served for the three and six months ended March 28, 2020 and March 30, 2019:

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
General Semiconductor	$ 67,369	$ 30,985	$ 117,835	$ 70,655
Automotive & Industrial	19,846	18,967	38,770	45,476
LED	10,167	7,091	22,058	24,536
Memory	8,950	11,697	19,853	39,312
Advanced Packaging	6,890	11,827	17,030	16,526
Total Capital Equipment revenue	$ 113,222	$ 80,567	$ 215,546	$ 196,505

The following table reflects capital expenditures, depreciation expense and amortization expense for the three and six months ended March 28, 2020 and March 30, 2019 .

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Capital expenditures:				
Capital Equipment	$ 812	$ 1,288	$ 1,886	$ 3,472
APS	1,963	946	3,213	3,704
	$ 2,775	$ 2,234	$ 5,099	$ 7,176
Depreciation expense:				
Capital Equipment	$ 1,491	$ 2,002	$ 3,034	$ 3,740
APS	1,458	1,366	2,857	2,520
	$ 2,949	$ 3,368	$ 5,891	$ 6,260
Amortization expense:				
Capital Equipment	$ 977	$ 1,003	$ 1,952	$ 2,010
APS	843	866	1,685	1,736
	$ 1,820	$ 1,869	$ 3,637	$ 3,746

NOTE 15: COMMITMENTS, CONTINGENCIES AND CONCENTRATIONS

Warranty Expense

The Company's equipment is generally shipped with a one -year warranty against manufacturing defects. The Company establishes reserves for estimated warranty expense when revenue for the related equipment is recognized. The reserve for estimated warranty expense is based upon historical experience and management's estimate of future warranty costs, including product part replacement, freight charges and labor costs incurred in correcting product failures during the warranty period.

The following table reflects the reserve for warranty activity for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Six months ended	
(in thousands)	March 28, 2020	March 30, 2019	March 28, 2020	March 30, 2019
Reserve for warranty, beginning of period	$ 14,714	$ 14,401	$ 14,185	$ 14,475
Provision for warranty	2,923	2,645	6,418	5,731
Utilization of reserve	(3,269)	(3,161)	(6,235)	(6,321)
Reserve for warranty, end of period	$ 14,368	$ 13,885	$ 14,368	$ 13,885

Other Commitments and Contingencies

The following table reflects obligations not reflected on the Consolidated Condensed Balance Sheet as of March 28, 2020 :

		Payments due by fiscal year					
(in thousands)	Total	2020	2021	2022	2023	2024	thereafter
Inventory purchase obligation (1)	$ 148,892	$ 148,892	$ —	$ —	$ —	$ —	$ —

(1) The Company orders inventory components in the normal course of its business. A portion of these orders are non-cancellable, however, some orders impose varying penalties and charges in the event of cancellation.

Concentrations

The following table reflects significant customer concentrations as a percentage of net revenue for the six months ended March 28, 2020 and March 30, 2019 .

	Six months ended	
	March 28, 2020	March 30, 2019
Xinye (HK) Electronics. Co (1)	10.6%	*
Micron Technology, Inc	*	15.3%

* Represented less than 10% of total net revenue

The following table reflects significant customer concentrations as a percentage of total accounts receivable as of March 28, 2020 and March 30, 2019 :

	As of	
	March 28, 2020	March 30, 2019
Xinye (HK) Electronics. Co (1)	17.3%	*
Haoseng Industrial Company Limited (1)	12.3%	*
Micron Technology, Inc	*	19.4%
Super Power International (1)	*	12.5%

(1) Distributor of the Company's products.
* Represented less than 10% of total accounts receivable

NOTE 16: SUBSEQUENT EVENTS

On April 24, 2020, the Company entered into foreign exchange forward contracts with notional amount of $14.5 million . The Company entered into these foreign exchange forward contracts to hedge a portion of our forecasted foreign currency-denominated expenses in the normal course of business and, accordingly, they are not speculative in nature. These foreign exchange forward contracts have maturities of up to twelve months .

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

Forward-Looking Statements

In addition to historical information, this filing contains statements relating to future events or our future results. These statements are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are subject to the safe harbor provisions created by statute. Such forward-looking statements include, but are not limited to, statements with respect to our future revenue, increasing, continuing or strengthening, or decreasing or weakening, demand for our products, replacement demand, our research and development efforts, our ability to identify and realize new growth opportunities, our ability to control costs and our operational flexibility as a result of (among other factors):

- *our expectations regarding the potential impacts on our business of the COVID-19 pandemic and of governmental and other responses to the pandemic;*
- *projected growth rates in the overall semiconductor industry, the semiconductor assembly equipment market, and the market for semiconductor packaging materials; and*
- *projected demand for ball bonder, wedge bonder, advanced packaging and electronic assembly equipment and for tools, spare parts and services.*

Generally, words such as "may," "will," "should," "could," "anticipate," "expect," "intend," "estimate," "plan," "continue," "goal" and "believe," or the negative of or other variations on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this filing. We do not undertake to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Forward-looking statements are based on current expectations and involve risks and uncertainties. Our future results could differ significantly from those expressed or implied by our forward-looking statements. These risks and uncertainties include, without limitation, those described below and under the heading "Risk Factors" in this report and in our Annual Report on Form 10-K for the fiscal year ended September 28, 2019 (the "Annual Report") and our other reports filed from time to time with the Securities and Exchange Commission. This discussion should be read in conjunction with the Consolidated Condensed Financial Statements and Notes included in this report, as well as our audited financial statements included in the Annual Report.

We operate in a rapidly changing and competitive environment. New risks emerge from time to time and it is not possible for us to predict all risks that may affect us. Given those risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictions of actual results.

OVERVIEW

Kulicke and Soffa Industries, Inc. ("We," the "Company" or "K&S") is a leading provider of semiconductor and electronic assembly solutions serving the global automotive, consumer, communications, computing and industrial markets. Founded in 1951, we pride ourselves on establishing foundations for technological advancement-creating, pioneering interconnect solutions that enable performance improvements, power efficiency, form-factor reductions and assembly excellence of current and next-generation semiconductor devices. Leveraging decades of development and process technology expertise, our expanding portfolio provides equipment solutions, aftermarket products and services supporting a comprehensive set of interconnect technologies including wire bonding, advanced packaging, lithography, and electronics assembly. Dedicated to empowering technological discovery, always, we collaborate with customers and technology partners to push the boundaries of possibility, enabling a smarter future.

We design, manufacture and sell capital equipment and tools used to assemble semiconductor devices, including integrated circuits ("ICs"), high and low powered discrete devices, light-emitting diodes ("LEDs"), and power modules. In addition, we have a portfolio of equipment that is used to assemble components onto electronic circuit boards. We also service, maintain, repair and upgrade our equipment and sell consumable aftermarket tools for our and our peer companies' equipment. Our customers primarily consist of semiconductor device manufacturers, integrated device manufacturers ("IDMs"), outsourced semiconductor assembly and test providers ("OSATs"), other electronics manufacturers and automotive electronics suppliers.

Our goal is to be the technology leader and the most competitive supplier in terms of cost and performance in each of our major product lines. Accordingly, we invest in research and engineering projects intended to enhance our position as a leader in semiconductor assembly technology. We also remain focused on our cost structure through continuous improvement and optimization of operations. Cost reduction efforts are an important part of our normal ongoing operations and are intended to generate savings without compromising overall product quality and service.

The Company operates two reportable segments consisting of: Capital Equipment and Aftermarket Products and Services ("APS"). The Company has aggregated twelve operating segments as of March 28, 2020 , with six operating segments within the Capital Equipment reportable segment and six operating segments within the APS reportable segment.

Our Capital Equipment segment engages in the manufacture and sale of ball bonders, wafer level bonders, wedge bonders, advanced packaging and electronic assembly solutions to semiconductor device manufacturers, IDMs, OSATs, other electronics manufacturers and automotive electronics suppliers. Our APS segment engages in the manufacture and sale of a variety of tools for a broad range of semiconductor packaging applications, spare parts, equipment repair, maintenance and servicing, training services, refurbishment and upgrades for our equipment.

Key Event in Fiscal 2020

A strain of Coronavirus ("COVID-19"), which was first detected in Wuhan, China in December 2019, has rapidly spread across China and across the globe, and on March 11, 2020, the World Health Organization declared COVID-19 a pandemic. As a result of the COVID-19 pandemic, many countries have suspended travel to and from affected countries and imposed quarantines. The commercial activities of our customers and suppliers in China and our manufacturing facility in Suzhou, China, were restricted for a period of time due to government-mandated closures, and employees were delayed in returning to work at our facility. COVID-19 has continued to spread into other parts of the world, with Europe and United States becoming the new epicenters of the COVID-19 pandemic. Various countries have implemented partial or national lockdowns to curb the spread.

The COVID-19 pandemic has significantly impacted the global economy, disrupted global supply chains, lowered equity market valuations, created significant volatility and disruption in financial markets, and significantly increased unemployment levels. In addition, the pandemic has resulted in temporary closures and failures of many businesses and the institution of social distancing and sheltering-in-place requirements in many jurisdictions.

In response to the outbreak, we have temporarily closed certain offices in the United States, Europe and Asia as well as executed our Business Continuity Plan ("BCP"), which measures have disrupted how we operate our business. While we are currently operating at nearly full capacity in all of our manufacturing locations, work-from-home practices were instituted across every office worldwide, which have impacted our non-manufacturing productivity, including our research & development. At this point, our BCP has not included significant headcount reductions or changes in our overall liquidity position.

We have not experienced long-lasting or significant delays in customer deliveries, but our supply chain is strained in some cases as the availability of materials, logistics options and freight costs are challenging in many jurisdictions. Demand for many of our products remains high, but we are seeing a lower projected demand in the automotive end market, which particularly impacts near-term demand for our wedge bonders. We believe the semiconductor industry macroeconomics have not changed and we anticipate the industry’s long-term growth projections will normalize, but the sector is expected to see significant short-term volatility and potential disruption.

Various countries have announced measures, including government grants, tax changes and tax credits, among other types of relief, in response to the pandemic. The Company has reviewed economic stimulus packages available in the jurisdictions in which we operate, such as the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) enacted on March 27, 2020 in the United States, to determine if the Company qualifies. Based on our current evaluation, the outbreak has not had a material impact on our financial condition and operating results in fiscal year 2020. However, as this is a highly dynamic situation, and it is still developing rapidly, there is uncertainty on our business and our near- and long-term liquidity, financial condition and operating results could deteriorate.

For other information on the COVID-19 pandemic, see the discussion in Part II Item 1A. *Risk Factors* .

Business Environment

The semiconductor business environment is highly volatile and is driven by internal dynamics, both cyclical and seasonal, in addition to macroeconomic forces. Over the long term, semiconductor consumption has historically grown, and is forecast to continue to grow. This growth is driven, in part, by regular advances in device performance and by price declines that result from improvements in manufacturing technology. In order to exploit these trends, semiconductor manufacturers, both IDMs and OSATs, periodically invest aggressively in latest generation capital equipment. This buying pattern often leads to periods of excess supply and reduced capital spending—the so-called semiconductor cycle. Within this broad semiconductor cycle there are also, generally weaker, seasonal effects that are specifically tied to annual, end-consumer purchasing patterns. Typically, semiconductor manufacturers prepare for heightened demand by adding or replacing equipment capacity by the end of the September quarter. Occasionally, this results in subsequent reductions in the December quarter. This annual seasonality can be overshadowed by effects of the broader semiconductor cycle. Macroeconomic factors also affect the industry, primarily through their effect on business and consumer demand for electronic devices, as well as other products that have significant electronic content such as automobiles, white goods, and telecommunication equipment.

The U.S. and several other countries have levied tariffs on certain goods and have introduced other trade restrictions, which, together with the impact of the COVID-19 pandemic discussed above, has resulted in substantial uncertainties in the semiconductor, LED, memory and automotive market with a resulting softening demand. While the Company anticipates long-term growth in semiconductor consumption, the adverse impacts on demand, which began in the fourth quarter of fiscal 2018, may continue through fiscal 2020 and beyond.

Our Capital Equipment segment is primarily affected by the industry's internal cyclical and seasonal dynamics in addition to broader macroeconomic factors that can positively or negatively affect our financial performance. The sales mix of IDM and OSAT customers in any period also impacts financial performance, as changes in this mix can affect our products' average selling prices and gross margins due to differences in volume purchases and machine configurations required by each customer type.

Our APS segment has historically been less volatile than our Capital Equipment segment. APS sales are more directly tied to semiconductor unit consumption rather than capacity requirements and production capability improvements.

We continue to position our business to leverage our research and development leadership and innovation and to focus our efforts on mitigating volatility, improving profitability and ensuring longer-term growth. We remain focused on operational excellence, expanding our product offerings and managing our business efficiently throughout the business cycles. Our visibility into future demand is generally limited, forecasting is difficult, and we generally experience typical industry seasonality.

To limit potential adverse cyclical, seasonal and macroeconomic effects on our financial position, we have continued our efforts to maintain a strong balance sheet. As of March 28, 2020 , our total cash, cash equivalents, restricted cash and short-term investments, net of short-term borrowings, were $524.7 million , a $7.6 million decrease from the prior fiscal year end. The Overdraft Facility allows us to meet our short-term funding needs, while we align our cash balances with our long term capital allocation strategy. We believe this strong cash position will allow us to continue to invest in product development and pursue non-organic opportunities.

Technology Leadership

We compete largely by offering our customers advanced equipment and expendable tools available for the interconnect processes. We believe our technology leadership contributes to the strong market positions of our ball bonder, wedge bonder and expendable tools products. To maintain our competitive advantage, we invest in product development activities designed to produce improvements to existing products and to deliver next-generation products. These investments often focus as much on improvements in the semiconductor assembly process as on specific pieces of assembly equipment or expendable tools. In order to generate these improvements, we typically work in close collaboration with customers, end users, and other industry members. In addition to producing technical advances, these collaborative development efforts strengthen customer relationships and enhance our reputation as a technology leader and solutions provider.

In addition to gold, silver alloy wire and aluminum wire, our leadership in the industry's use of copper wire for the bonding process is an example of the benefits of our collaborative efforts. By working with customers, material suppliers, and other equipment suppliers, we have developed a series of robust, high-yielding production processes, which have made copper wire widely accepted and significantly reduced the cost of assembling an integrated circuit.

Our leadership also has allowed us to maintain a competitive position in the latest generations of ball bonders. Gen-S is our smart bonder series and RAPID™ is the first product in the series to address the Industry 4.0 requirements. The key features of this series include Real-time Process & Performance Monitoring, Real-time Equipment Health Monitoring, Advanced Data Analytics & Traceability, Predictive Maintenance Monitoring & Analysis, and Detection & Enhanced Post-Bond Inspection.

We optimize our bonder platforms to deliver variants of our products to serve emerging high-growth markets. For example, we have developed extensions of our Gen-S platforms (Rapid™ MEM) to address opportunities in memory assembly, in particular for NAND Flash storage.

Our leading technology for wedge bonder equipment uses ribbon or heavy wire for different applications such as power electronics, automotive and semiconductor applications. The advanced interconnect capabilities of PowerFusion ^{PS} improve the processing of high-density power packages, due to an expanded bondable area, wider leadframe capability, indexing accuracy and teach mode. In all cases, we are making a concerted effort to develop commonality of subsystems and design practices, in order to improve performance and design efficiencies. We believe this will benefit us as it increases synergies between the various engineering product groups. Furthermore, we continually research adjacent market segments where our technologies could be used. Although many of these initiatives are in the early stages of development, some have already yielded results such as the Asterion™ hybrid wedge bonder which is built on an enhanced architecture that includes an expanded bond area, new robust pattern recognition capabilities and extremely tight process controls. Another example of our developing equipment for high-growth niche markets is our AT Premier *PLUS* . This machine utilizes a modified wire bonding process to mechanically place bumps on devices in a wafer format, for variants of the flip chip assembly process. Typical applications include complementary metal-oxide semiconductor (“CMOS”) image sensors, surface acoustical wave (“SAW”) filters and high brightness LEDs. These applications are commonly used in most, if not all, smartphones available in the market. We also have expanded the use of AT Premier *PLUS* for wafer level wire bonding for micro-electro-mechanical systems (“MEMS”) and other sensors.

Our technology leadership and bonding process know-how have enabled us to develop highly function-specific equipment with high throughput and accuracy. This forms the foundation for our advanced packaging equipment development. We established a dedicated team to develop and manufacture advanced packaging bonders for the emerging 2.5 dimensional integrated circuit (“2.5D IC”) and 3 dimensional integrated circuit (“3D IC”) markets. By reducing the interconnect dimensions, 2.5D ICs and 3D ICs are expected to provide form factor, performance and power efficiency enhancements over traditional flip-chip packages in production today. High-performance processing and memory applications, in addition to mobile devices such as smartphones and tablets, are anticipated to be earlier adopters of this new packaging technology.

We have also broadened our advanced packaging solutions for mass reflow to include flip chip, wafer level packaging ("WLP"), fan-out wafer level packaging ("FOWLP"), advanced package-on-package, embedded die, and System-in-Package ("SiP"). These solutions enable us to diversify our business while further expanding market reach into the automotive, LED lighting, medical and industrial segments with electronic assembly solutions.

In fiscal 2019, we entered into a new market, miniLED for display backlighting and direct emitting display, with the recent launch of PIXALUX ™ . The PIXALUX ™ is a high speed die placement equipment with the potential for mass production of market-ready solutions for miniLED placement in the market. MiniLEDs are potentially used in TV, IT display, large display, signage display, consumer display and automotive markets. We expect the usage of miniLED to grow significantly over the next few years.

We bring the same technology focus to our APS business, driving tool design and manufacturing technology to optimize the performance and process capability of the equipment in which our tools are used. For all our equipment products, expendable tools are an integral part of their process capability. We believe our unique ability to simultaneously develop both equipment and tools, spare parts and services is a core strength supporting our products' technological differentiation.

Segment Information

The following tables reflect net revenue by business segment for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
	March 28, 2020		March 30, 2019	
(dollar amounts in thousands)	Net revenues	% of total net revenue	Net revenues	% of total net revenue
Capital Equipment	$ 113,222	75.1%	$ 80,567	69.5%
APS	37,519	24.9%	35,341	30.5%
	$ 150,741	100.0%	$ 115,908	100.0%

	Six months ended			
	March 28, 2020		March 30, 2019	
(dollar amounts in thousands)	Net revenues	% of total net revenue	Net revenues	% of total net revenue
Capital Equipment	$ 215,546	73.1%	$ 196,505	71.9%
APS	79,492	26.9%	76,611	28.1%
	$ 295,038	100.0%	$ 273,116	100.0%

RESULTS OF OPERATIONS

The following tables reflect our income (loss) from operations for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Net revenue	$ 150,741	$ 115,908	$ 34,833	30.1 %
Cost of sales	81,438	60,335	21,103	35.0 %
Gross profit	69,303	55,573	13,730	24.7 %
Selling, general and administrative	29,160	28,461	699	2.5 %
Research and development	29,067	29,577	(510)	(1.7)%
Operating expenses	58,227	58,038	189	0.3 %
Income/(loss) from operations	$ 11,076	$ (2,465)	$ 13,541	549.3 %

	Six months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Net revenue	$ 295,038	$ 273,116	$ 21,922	8.0 %
Cost of sales	155,371	142,744	12,627	8.8 %
Gross profit	139,667	130,372	9,295	7.1 %
Selling, general and administrative	57,818	58,902	(1,084)	(1.8)%
Research and development	57,359	59,380	(2,021)	(3.4)%
Operating expenses	115,177	118,282	(3,105)	(2.6)%
Income from operations	$ 24,490	$ 12,090	$ 12,400	102.6 %

Our net revenues for the three and six months ended March 28, 2020 increased as compared to our net revenues for the three and six months ended March 30, 2019 . The increase in net revenue is primarily due to higher volume in both Capital Equipment and APS.

The COVID-19 pandemic has impacted our non-manufacturing productivity, including our research & development. However, we have not yet experienced long-lasting or significant delays in customer deliveries, though our supply chain is strained in some cases as the availability of materials, logistics options and freight costs are challenging in many jurisdictions. Demand for many of our products remains high, but we are seeing lower projected demand in the automotive end market, which particularly impacts near-term demand for our wedge bonders. We believe the semiconductor industry macroeconomics have not changed and we anticipate the industry’s long-term growth projections will normalize, but the sector is expected to see short-term volatility.

Generally, the semiconductor industry is volatile and our operating results are adversely impacted by volatile worldwide economic conditions. Though the semiconductor industry's cycle can be independent of the general economy, global economic conditions may have a direct impact on demand for semiconductor units and ultimately demand for semiconductor capital equipment and expendable tools. Accordingly, our business and financial performance is impacted, both positively and negatively, by fluctuations in the macroeconomic environment. Our visibility into future demand is generally limited and forecasting is difficult, particularly in light of substantial uncertainty about when the effects of the pandemic will recede. There can be no assurances regarding levels of demand for our products and we believe historic industry-wide volatility will persist.

The U.S. and several other countries have levied tariffs on certain goods and have introduced retaliatory measures or other trade restrictions, which, together with the impact of the COVID-19 pandemic discussed above, has resulted in substantial uncertainties in the semiconductor, LED, memory and automotive markets. While the Company anticipates long-term growth in semiconductor consumption, the adverse impacts on demand, which began in the fourth quarter of fiscal 2018, may continue through fiscal 2020 and beyond.

Net Revenue

In the Asia/Pacific region, our customer base has also become more geographically concentrated as a result of economic and industry conditions. Approximately 94.8% and 94.4% of our net revenue for the three months ended March 28, 2020 and March 30, 2019 , respectively, was for shipments to customer locations outside of the U.S., primarily in the Asia/Pacific region. Approximately

60.1% and 40.6% of our net revenue for the three months ended March 28, 2020 and March 30, 2019 , respectively, was for shipments to customers located in China.

Similarly, approximately 93.3% and 93.8% of our net revenue for the six months ended March 28, 2020 and March 30, 2019 , respectively, was for shipments to customer locations outside of the U.S., primarily in the Asia/Pacific region. Approximately 55.3% and 39.0% of our net revenue for the six months ended March 28, 2020 and March 30, 2019 , respectively, was for shipments to customers located in China.

The following tables reflect net revenue by business segment for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 113,222	$ 80,567	$ 32,655	40.5%
APS	37,519	35,341	2,178	6.2%
Total net revenue	$ 150,741	$ 115,908	$ 34,833	30.1%

	Six months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 215,546	$ 196,505	$ 19,041	9.7%
APS	79,492	76,611	2,881	3.8%
Total net revenue	$ 295,038	$ 273,116	$ 21,922	8.0%

Capital Equipment

The following table reflects the components of Capital Equipment net revenue change between the three and six months ended March 28, 2020 and March 30, 2019 :

	March 28, 2020 vs. March 30, 2019					
	Three months ended			Six months ended		
(in thousands)	Price	Volume	$ Change	Price	Volume	$ Change
Capital Equipment	$ (12,356)	$ 45,011	$ 32,655	$ (19,950)	$ 38,991	$ 19,041

For the three months ended March 28, 2020 , the higher Capital Equipment net revenue as compared to the prior year period was primarily due to higher volume. The higher volume was primarily driven by growing demand in the general semiconductor market for consumer applications and telecommunication infrastructure renewal for 5G buildout and partially offset by lower demand in the memory market. The higher volume was partially offset by unfavorable price variance due to unfavorable customer and product mix.

For the six months ended March 28, 2020 , the higher Capital Equipment net revenue as compared to the prior year period was primarily due to higher volume. The higher volume was primarily driven by growing demand in the general semiconductor market for consumer applications, telecommunication infrastructure renewal for 5G buildout, and partially offset by lower demand in the memory and automotive markets. The higher volume was partially offset by unfavorable price variance due to unfavorable customer and product mix.

APS

The following table reflects the components of APS net revenue change between the three and six months ended March 28, 2020 and March 30, 2019 :

	March 28, 2020 vs. March 30, 2019					
	Three months ended			Six months ended		
(in thousands)	Price	Volume	$ Change	Price	Volume	$ Change
APS	$ (1,117)	$ 3,295	$ 2,178	$ (1,645)	$ 4,526	$ 2,881

For the three and six months ended March 28, 2020 , the higher APS net revenue as compared to the prior year period was primarily due to higher volume in spares, consumables and services as a result of higher utilization of our products. This was partially offset by a price reduction in our bonding tools business.

Gross Profit

The following tables reflect gross profit by reportable segment for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 49,142	$ 35,848	$ 13,294	37.1%
APS	20,161	19,725	436	2.2%
Total gross profit	$ 69,303	$ 55,573	$ 13,730	24.7%

	Six months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 95,396	$ 86,779	$ 8,617	9.9%
APS	44,271	43,593	678	1.6%
Total gross profit	$ 139,667	$ 130,372	$ 9,295	7.1%

The following tables reflect gross profit as a percentage of net revenue by reportable segments for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Basis Point
	March 28, 2020	March 30, 2019	Change
Capital Equipment	43.4%	44.5%	(110)
APS	53.7%	55.8%	(210)
Total gross margin	46.0%	47.9%	(190)

	Six months ended		Basis Point
	March 28, 2020	March 30, 2019	Change
Capital Equipment	44.3%	44.2%	10
APS	55.7%	56.9%	(120)
Total gross margin	47.3%	47.7%	(40)

For the three and six months ended March 28, 2020 , the higher gross profit margin as compared to the prior year period was primarily due to higher gross margin from Capital Equipment as discussed below.

Capital Equipment

The following table reflects the components of Capital Equipment gross profit change between the three and six months ended March 28, 2020 and March 30, 2019 :

	March 28, 2020 vs. March 30, 2019							
	Three months ended				Six months ended			
(in thousands)	Price	Cost	Volume	$ Change	Price	Cost	Volume	$ Change
Capital Equipment	$ (12,356)	$ 5,942	$ 19,708	$ 13,294	$ (19,950)	$ 7,863	$ 20,704	$ 8,617

For the three months ended March 28, 2020 , the higher Capital Equipment gross profit as compared to the prior year period was primarily due to higher volume and lower cost. The higher volume was primarily driven by growing demand in the general semiconductor market for consumer applications and telecommunication infrastructure renewal for 5G buildout and partially offset by lower demand in the memory market. The lower cost was due to better absorption from higher manufacturing volume. The higher volume and lower cost were partially offset by unfavorable price variance due to unfavorable customer and product mix.

For the six months ended March 28, 2020 , the higher Capital Equipment gross profit as compared to the prior year period was primarily due to higher volume and lower cost. The higher volume was primarily driven by growing demand in the general semiconductor market for consumer applications and telecommunication infrastructure renewal for 5G buildout, and partially offset by lower demand in the memory and automotive markets. The lower cost was due to better absorption from higher manufacturing volume. The higher volume and lower cost were partially offset by unfavorable price variance due to unfavorable customer and product mix.

APS

The following table reflects the components of APS gross profit change between the three and six months ended March 28, 2020 and March 30, 2019 :

	March 28, 2020 vs. March 30, 2019							
	Three months ended				Six months ended			
(in thousands)	Price	Cost	Volume	$ Change	Price	Cost	Volume	$ Change
APS	$ (1,117)	$ 130	$ 1,423	$ 436	$ (1,645)	$ (335)	$ 2,658	$ 678

For the three and six months ended March 28, 2020 , the higher APS gross profit as compared to the prior year period was primarily due to higher volume in spares, consumables and services as a result of higher utilization of our products. This was partially offset by a price reduction in bonding tools business.

Income from Operations

The following tables reflect income from operations by business segment for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 4,062	$ (9,244)	$ 13,306	143.9%
APS	7,014	6,779	235	3.5%
Total income/(loss) from operations	$ 11,076	$ (2,465)	$ 13,541	549.3%

	Six months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Capital Equipment	$ 6,770	$ (4,114)	$ 10,884	264.6%
APS	17,720	16,204	1,516	9.4%
Total income from operations	$ 24,490	$ 12,090	$ 12,400	102.6%

Capital Equipment

For the three and six months ended March 28, 2020 , the higher Capital Equipment income from operations as compared to the prior year period was primarily due to higher volume and lower cost as explained under 'Gross Profit' above, and partially offset by higher operating expense.

APS

For the three and six months ended March 28, 2020 , the higher APS income from operations as compared to the prior year period was primarily due to higher volume as explained under 'Gross Profit' above, and partially offset by higher operating expense.

Operating Expenses

The following tables reflect operating expenses as a percentage of net revenue for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended		Basis point
	March 28, 2020	March 30, 2019	change
Selling, general & administrative	19.3%	24.6%	(530)
Research & development	19.3%	25.5%	(620)
Total	38.6%	50.1%	(1,150)

	Six months ended		Basis point
	March 28, 2020	March 30, 2019	change
Selling, general & administrative	19.6%	21.6%	(200)
Research & development	19.4%	21.7%	(230)
Total	39.0%	43.3%	(430)

Selling, General and Administrative ("SG&A")

For the three months ended March 28, 2020 , higher SG&A expenses as compared to the prior period were primarily due to $1.7 million higher staff costs related to higher incentive compensation as a result of the better current fiscal quarter performance, which was partially offset by lower staff costs due to lower headcount. This was partially offset by $1.3 million net favorable variance in foreign exchange. The lower SG&A expenses as a percentage of the net revenue is primarily due to higher rate of net revenue increase as compared to the rate of increase in SG&A expenses during the current fiscal quarter.

For the six months ended March 28, 2020 , lower SG&A expenses as compared to prior period were primarily due to $2.7 million net favorable variance in foreign exchange. This was partially offset by $1.1 million lower severance and restructuring expenses in the prior year period and $0.4 million higher staff costs related to an increase in incentive compensation as a result of the better performance in the current period.

Research and Development ("R&D")

For the three and six months ended March 28, 2020 , lower R&D expenses as compared to the prior year period were primarily due to lower staff costs as a result of decrease in headcount and lower spending in development of prototypes.

Interest Income and Expense

The following tables reflect interest income and interest expense for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Interest income	$ 2,675	$ 3,865	$ (1,190)	(30.8)%
Interest expense	$ (661)	$ (254)	$ (407)	160.2 %

	Six months ended			
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	$ Change	% Change
Interest income	$ 5,514	$ 7,691	$ (2,177)	(28.3)%
Interest expense	$ (1,244)	$ (505)	$ (739)	146.3 %

For the three and six months ended March 28, 2020 , interest income was lower as compared to the prior year period. This was primarily due to lower weighted average interest rate on cash, cash equivalents and short-term investments compared to the same period in the prior year.

For the three and six months ended March 28, 2020 , interest expense was higher as compared to prior year period. This was primarily due to higher short-term debt (Refer to Note 9 of Item 1) and partially offset by lower interest on the financing obligation relating to our corporate headquarters. The financing obligation was derecognized pursuant to the transition guidance provided in ASC 842 following the adoption at the beginning of the current fiscal year.

Provision for Income Taxes

The following table reflects the provision for income taxes and the effective tax rate for the three and six months ended March 28, 2020 and March 30, 2019 :

	Three months ended			Six months ended		
(dollar amounts in thousands)	March 28, 2020	March 30, 2019	Change	March 28, 2020	March 30, 2019	Change
Provision for income taxes	$ 1,162	$ 4,672	$ (3,510)	$ 3,295	$ 15,242	$ (11,947)
Effective tax rate	8.9%	407.7%	(398.8)%	11.5%	79.1%	(67.6)%

Please refer to Note 13 of Item 1 for discussion on the provision for income taxes and the effective tax rate for the three and six months ended March 28, 2020 as compared to the prior year period.

LIQUIDITY AND CAPITAL RESOURCES

The following table reflects total cash, cash equivalents, and short-term investments as of March 28, 2020 and September 28, 2019 :

	As of		
(dollar amounts in thousands)	March 28, 2020	September 28, 2019	$ Change
Cash and cash equivalents	$ 392,307	$ 364,184	$ 28,123
Short-term investments	248,000	229,000	19,000
Total cash, cash equivalents, and short-term investments	$ 640,307	$ 593,184	$ 47,123
Percentage of total assets	55.2%	54.9%	

The following table reflects a summary of the Consolidated Condensed Statement of Cash Flow information for the six months ended March 28, 2020 and March 30, 2019 :

	Six months ended	
(in thousands)	March 28, 2020	March 30, 2019
Net cash provided by operating activities	$ 39,083	$ 83,335
Net cash (used in)/provided by investing activities	(24,979)	73,689
Net cash provided by/(used in) financing activities	14,258	(59,092)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(239)	257
Changes in cash, cash equivalents and restricted cash	$ 28,123	$ 98,189
Cash, cash equivalents and restricted cash, beginning of period	364,184	321,148
Cash, cash equivalents and restricted cash, end of period	$ 392,307	$ 419,337

Six months ended March 28, 2020

Net cash provided by operating activities was primarily due to net income of $25.4 million and non-cash adjustments to net income of $21.8 million and a decrease in net change in operating assets and liabilities of $8.1 million . The decrease in net change in operating assets and liabilities was primarily driven by an increase in inventory of $19.0 million , an increase in prepaid expenses and other current assets of $8.7 million , a decrease in income tax payable of $6.0 million , and an increase in accounts and notes receivables of $3.8 million . This was partially offset by an increase in accounts payable, accrued expenses and other current liabilities of $29.6 million .

The increase in inventory was due to higher manufacturing activities during second quarter of fiscal 2020 as compared to the fourth quarter of fiscal 2019 in anticipation of higher demand in subsequent period. The increase in accounts receivable was due to higher sales in the second quarter of fiscal 2020 as compared to the fourth quarter of fiscal 2019. The decrease in income tax payable was mainly due to repayment. The higher accounts payable, accrued expenses and other current liabilities was primarily due to higher purchases, higher customer advance payment and higher accruals on incentive compensation and other bonuses in the second quarter of fiscal 2020.

Net cash used by investing activities was due to net placement of short-term investments of $19.0 million , capital expenditures of $4.7 million and an equity investment of $1.3 million .

Net cash provided by financing activities was primarily due to a draw-down under the Overdraft Facility of $54.7 million . The draw-down from the Overdraft Facility is to meet our short-term funding needs, while we align our cash balances with our long term capital allocation strategy. This was partially offset by common stock repurchases of $25.2 million and dividend payments of $15.2 million .

Six months ended March 30, 2019

Net cash provided by operating activities was primarily due to the increase in net change in operating assets and liabilities of $61.7 million, non-cash adjustments to net income of $17.6 million and net income of $4.0 million. The increase in net change in operating assets and liabilities was primarily driven by a decrease in accounts and notes receivable of $104.9 million related to the lower sales, a decrease in inventory of $11.4 million and a decrease in prepaid expenses and other assets of $1.2 million. This was partially offset by a decrease in accounts payable, accrued expenses and other current liabilities of $54.9 million, also related to the lower sales, and a decrease in income tax payable of $1.3 million.

The decrease in accounts receivable was due to higher sales in the fourth quarter of fiscal 2018 as compared to the second quarter of fiscal 2019 as well as timing of collections. The decrease in inventory was due to decreased manufacturing activities in second quarter of fiscal 2019 as compared to the fourth quarter of fiscal 2018 in response to lower sales levels in fiscal 2019. The lower accounts payable, accrued expenses and other current liabilities was primarily due to lower accruals on incentive compensation and other bonuses as a result of payment made in the first half of fiscal 2019 and lower purchases due to lower manufacturing activities. The decrease in income tax payable was mainly due to payment of tax during the first half of fiscal 2019.

Net cash provided by investing activities was due to net redemption of short-term investments of $85.0 million. This was partially offset by capital expenditures of $6.3 million and the equity investment of $5.0 million.

Net cash used in financing activities was primarily due to common stock repurchases of $52.6 million and dividend payment of $16.1 million. These were partially offset by a short-term debt of $10.0 million.

Fiscal 2020 Liquidity and Capital Resource Outlook

We expect our aggregate fiscal 2020 capital expenditures to be between $14.0 million and $18.0 million, of which approximately $5.1 million has been incurred through the second quarter. The actual amounts for 2020 will vary depending on market conditions. Expenditures are anticipated to be primarily used for R&D projects, enhancements to our manufacturing operations in Asia, improvements to our information technology infrastructure and leasehold improvements for our facilities.

As of March 28, 2020 and September 28, 2019 , approximately $632.3 million and $591.3 million of cash, cash equivalents, and short-term investments were held by the Company's foreign subsidiaries, respectively, and are expected to be available for use in the U.S. without incurring additional income tax.

The Company’s international operations and capital requirements are anticipated to be funded primarily by cash generated by foreign operating activities and cash held by foreign subsidiaries. Most of the Company's operations and liquidity needs are outside the U.S. The Company’s U.S. operations and capital requirements are anticipated to be funded primarily by cash generated from U.S. operating activities, and by our existing Facility Agreements with MUFG Bank, Ltd. In the future, the Company may repatriate additional cash held by foreign subsidiaries that has already been subject to U.S. income taxes. We believe these sources of cash and liquidity are sufficient to meet our business needs in the U.S. for the foreseeable future including funding of U.S. operations, capital expenditures, repayment of outstanding balances under the Facility Agreements, the dividend program, and the share repurchase program as approved by the Board of Directors.

We believe that our existing cash and investments, existing Facility Agreements, and anticipated cash flows from operations will be sufficient to meet our liquidity and capital requirements for at least the next twelve months. Our liquidity is affected by many factors, some based on normal operations of our business and others related to global economic conditions and industry uncertainties, which we cannot predict. We also cannot predict economic conditions or industry downturns or the timing, strength or duration of recoveries. We intend to continue to use our cash for working capital needs and for general corporate purposes.

We may seek, as we believe appropriate, additional debt or equity financing that would provide capital for corporate purposes, working capital funding, additional liquidity needs or to fund future growth opportunities, including possible acquisitions. The timing and amount of potential capital requirements cannot be determined at this time and will depend on a number of factors, including the actual and projected demand for our products, semiconductor and semiconductor capital equipment industry conditions, competitive factors, and the condition of financial markets.

Share Repurchase Program

On August 15, 2017, the Company’s Board of Directors authorized a program (the "Program") to repurchase up to $100 million in total of the Company’s common stock on or before August 1, 2020. On July 10, 2018, the Board of Directors increased the share repurchase authorization under the Program to $200 million. On January 31, 2019, the Board of Directors further increased the share repurchase authorization under the Program to $300 million. The Company has entered into a written trading plan under Rule 10b5-1 of the Exchange Act to facilitate repurchases under the Program. The Program may be suspended or discontinued at any time and is funded using the Company's available cash, cash equivalents and short-term investments. Under the Program, shares may be repurchased through open market and/or privately negotiated transactions at prices deemed appropriate by management. The timing and amount of repurchase transactions under the Program depend on market conditions as well as corporate and regulatory considerations. During the three and six months ended March 28, 2020 , the Company repurchased a total of 0.9 million and 1.1 million shares of common stock under the Program at a cost of $18.5 million and $23.9 million , respectively. As of March 28, 2020 , our remaining stock repurchase authorization under the Program was approximately $73.3 million .

Dividends

On February 20, 2020 and December 12, 2019, the Board of Directors declared a quarterly dividend of $0.12 per share of common stock. Dividends paid during the three and six months ended March 28, 2020 totaled $7.7 million and $15.2 million , respectively. The declaration of any future cash dividend is at the discretion of the Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements, business conditions and other factors, as well as a determination that such dividends are in the best interests of the Company's shareholders.

Other Obligations and Contingent Payments

In accordance with GAAP, certain obligations and commitments are not required to be included in the Consolidated Condensed Balance Sheets and Statements of Operations. These obligations and commitments, while entered into in the normal course of business, may have a material impact on our liquidity and are disclosed in the table below.

As of March 28, 2020 , the Company has deferred tax liabilities of $33.7 million and unrecognized tax benefits within the income tax payable for uncertain tax positions of $13.0 million, inclusive of accrued interest on uncertain tax positions of $1.6 million. These amounts are not included in the table below because we are unable to reasonably estimate the timing of these payments at this time.

The following table presents certain payments due by the Company under contractual obligations with minimum firm commitments as of March 28, 2020 :

		Payments due in			
(in thousands)	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Inventory purchase obligations [1]	$ 148,892	$ 148,892	$ —	$ —	$ —
U.S. one-time transition tax payable [2] (reflected on our Consolidated Condensed Balance Sheets)	67,161	5,676	12,944	28,316	20,225
Asset retirement obligations [3] (reflected on our Consolidated Condensed Balance Sheets)	1,692	407	39	1,115	131
Total	$ 217,745	$ 154,975	$ 12,983	$ 29,431	$ 20,356

(1) We order inventory components in the normal course of our business. A portion of these orders are non-cancellable and a portion may have varying penalties and charges in the event of cancellation.

(2) Associated with the U.S. one-time transition tax on certain earnings and profits of our foreign subsidiaries in relation to the TCJA.

(3) Asset retirement obligations are associated with commitments to return the property to its original condition upon lease termination at various sites.

Off-Balance Sheet Arrangements

Bank Guarantees

On November 22, 2013, the Company obtained a $5.0 million credit facility with Citibank in connection with the issuance of bank guarantees for operational purposes. As of March 28, 2020 , the outstanding amount under this facility was $3.5 million .

Credit facilities

On February 15, 2019, the Company entered into a Facility Letter and Overdraft Agreement (collectively, the “Facility Agreements”) with MUFG Bank, Ltd., Singapore Branch (the “Bank”). The Facility Agreements provide the Company with an overdraft line of credit facility of up to $150.0 million (the “Overdraft Facility”) for general corporate purposes. Amounts outstanding under the Overdraft Facility, including interest, are payable upon thirty days written demand by the Bank. Interest on the Overdraft Facility is calculated on a daily basis, and the applicable interest rate is calculated at the overnight U.S. Dollar LIBOR rate plus a margin of 1.5% per annum. The Overdraft Facility is an unsecured facility per the terms of the Facility Agreements. The Facility Agreements contain customary non-financial covenants, including, without limitation, covenants that restrict the Company’s ability to sell or dispose of its assets, cease owning at least 51% of one of its subsidiaries (the "Subsidiary") or encumber its assets with material security interests (including any pledge of monies in the Subsidiary’s cash deposit account with the Bank). The Facility Agreements also contain typical events of default, including, without limitation, non-payment of financial obligations when due, cross defaults to other material indebtedness of the Company, and breach of a representation or warranty under the Facility Agreements. As of March 28, 2020 , the outstanding amount under the Facility Agreements was $115.6 million .

As of March 28, 2020 , we did not have any other off-balance sheet arrangements, such as contingent interests or obligations associated with variable interest entities.

Item 3. - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our available-for-sale securities, if applicable, may consist of short-term investments in highly rated debt instruments of the U.S. Government and its agencies, financial institutions, and corporations. We continually monitor our exposure to changes in interest rates and credit ratings of issuers with respect to any available-for-sale securities and target an average life to maturity of less than 18 months. Accordingly, we believe that the effects on us of changes in interest rates and credit ratings of issuers are limited and would not have a material impact on our financial condition or results of operations.

Foreign Currency Risk

Our international operations are exposed to changes in foreign currency exchange rates due to transactions denominated in currencies other than the location's functional currency. Our international operations are also exposed to foreign currency fluctuations that impact the remeasurement of net monetary assets of those operations whose functional currency, the U.S. dollar, differs from their respective local currencies, most notably in Israel, Singapore and Switzerland. In addition to net monetary remeasurement, we have exposures related to the translation of subsidiary financial statements from their functional currency, the local currency, into its reporting currency, the U.S. dollar, most notably in the Netherlands, China, Taiwan, Japan and Germany. Our U.S. operations also have foreign currency exposure due to net monetary assets denominated in currencies other than the U.S. dollar.

Based on our foreign currency exposure as of March 28, 2020 , a 10.0% fluctuation could impact our financial position, results of operations or cash flows by $2.0 to $3.0 million. Our attempts to hedge against these risks may not be successful and may result in a material adverse impact on our financial results and cash flow.

We enter into foreign exchange forward contracts to hedge a portion of our forecasted foreign currency-denominated expenses in the normal course of business and, accordingly, they are not speculative in nature. These instruments generally mature within twelve months. We have foreign exchange forward contracts with a notional amount of $32.8 million outstanding as of March 28, 2020 .

Item 4. - CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 28, 2020 . Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of March 28, 2020 our disclosure controls and procedures were effective in providing reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934, as amended, is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding disclosure.

Changes in Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

In connection with the evaluation by our management, including with the participation of our Chief Executive Officer and Chief Financial Officer, of our internal control over financial reporting, no changes during the three months ended March 28, 2020 were identified to have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. - OTHER INFORMATION

Item 1A. - RISK FACTORS

Certain Risks Related to Our Business

The following risk factors should be considered in conjunction with the other risk factors disclosed under Item 1A. Risk Factors disclosed in Part I of the Annual Report. These factors could materially and adversely affect the company’s business, financial condition or results of operations and cause reputational harm, and should be carefully considered in evaluating the Company and its business, in addition to other information presented elsewhere in this report.

The effects of the COVID-19 pandemic could adversely affect our business, results of operations, and financial condition.

A strain of Coronavirus ("COVID-19"), which was first detected in Wuhan, China in December 2019, has rapidly spread across China and across the globe, and on March 11, 2020, the World Health Organization declared COVID-19 a pandemic. As a result of the COVID-19 pandemic, many countries have suspended travel to and from affected countries and imposed quarantines on affected individuals. The commercial activities of our customers and suppliers in China and our manufacturing facility in Suzhou, China, were restricted for a period of time due to government-mandated closures, and employees were delayed in returning to work at our facility. COVID-19 has continued to spread into other parts of the world, with Europe and United States becoming the new epicenters of the COVID-19 pandemic. Various countries have implemented partial or national lockdowns to curb the spread.

The COVID-19 pandemic has significantly impacted the global economy, disrupted global supply chains, lowered equity market valuations, created significant volatility and disruption in financial markets, and significantly increased unemployment levels. In addition, the pandemic has resulted in temporary closures and failures of many businesses and the institution of social distancing and sheltering-in-place requirements in many jurisdictions.

In response to the outbreak, we have temporarily closed certain offices in the United States, Europe and Asia as well as executed our Business Continuity Plan ("BCP"), which measures have significantly disrupted how we operate our business. While we are currently operating at nearly full capacity in all of our manufacturing locations, work-from-home practices were instituted across every office worldwide, which have impacted our non-manufacturing productivity, including our research & development.

The duration and extent of the impact from the COVID-19 pandemic depends on future developments that cannot be accurately predicted at this time, but may include the following:

- a decrease in short-term and/or long-term demand for our products resulting from widespread business shutdowns and slowdowns, quarantines, travel and logistics restrictions and other actions taken by governments, businesses, and the general public in an effort to limit exposure to and spread of COVID-19;
- negative impacts to our operations, technology development, new product introduction and customer qualifications resulting from our efforts to mitigate the impact of COVID-19 through execution of our BCP;
- disruptions to our supply chain, including materials, equipment, engineering support and services, due to efforts to contain the spread of COVID-19;
- more difficult and more expensive travel and transportation of our supplies and products, ultimately affecting the sales of our products;
- increased volatility in the semiconductor industry due to heightened uncertainty, including our inability to keep pace relative to our competitors during a post-COVID-19 market recovery should that occur; and
- reduced sales volume to or loss of significant customers, or cancellation, delay or reduction of backlogged customer orders.

Due to the unprecedented and rapidly changing social and economic impacts associated with the COVID-19 pandemic on the global economy generally, we are unable to predict or estimate the ultimate impact on our business or business prospects. The ultimate significance of COVID-19 on our business will depend on, among other things: the extent and duration of the pandemic, the severity of the disease and the number of people infected with the virus; the effects on the economy of the pandemic and of the measures taken by governmental authorities and other third parties restricting day-to-day life and the length of time that such measures remain in place; and governmental programs implemented to assist businesses impacted by the COVID-19 pandemic. At this time, we cannot estimate the short- or long-term impacts of COVID-19 on our business, liquidity, results of operations or financial condition.

We are implementing a new enterprise resource planning system. Our failure to implement it successfully, on time and on budget could have a material adverse effect on us.

We are currently in the process of reviewing a new enterprise resource planning ("ERP") system and will be implementing the new system over the next two years. ERP implementations are complex, time-consuming, and involve substantial expenditures on system software and implementation activities. The ERP system will be critical to our ability to provide important information to our management, obtain and deliver products, provide services and customer support, send invoices and track payments, fulfill contractual obligations, accurately maintain books and records, provide accurate, timely and reliable reports on our financial and operating results, and otherwise operate our business. ERP implementations also require transformation of business and financial processes in order to reap the benefits of the ERP system. Any such implementation involves risks inherent in the conversion to a new computer system, including loss of information and potential disruption to our normal operations. The implementation and maintenance of the new ERP system has required, and will continue to require, the investment of significant financial and human resources and the implementation may be subject to delays and cost overruns. In addition, we may not be able to successfully complete the implementation of the new ERP system without experiencing difficulties. Any disruptions, delays or deficiencies in the design and implementation or the ongoing maintenance of the new ERP system could adversely affect our ability to process orders, ship products, provide services and customer support, send invoices and track payments, fulfill contractual obligations, accurately maintain books and records, provide accurate, timely and reliable reports on our financial and operating results, including reports required by the SEC, and otherwise operate our business. Additionally, if we do not effectively implement the ERP system as planned or the system does not operate as intended, the effectiveness of our internal control over financial reporting could be adversely affected or our ability to assess it adequately could be delayed.

Item 2. - UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table summarizes the repurchases of common stock during the three months ended March 28, 2020 (in millions, except number of shares, which are reflected in thousands, and per share amounts):

Period	Total Number of Shares Repurchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs (1)
December 29, 2019 to January 25, 2020	16	$ 27.10	16	$ 91.3
January 26, 2020 to February 29, 2020	126	$ 23.68	126	$ 88.4
March 1, 2020 to March 28, 2020	730	$ 20.69	730	$ 73.3
For the three months ended March 28, 2020	872		872	

(1) On August 15, 2017, the Company's Board of Directors authorized a program (the "Program") to repurchase up to $100 million in total of the Company's common stock on or before August 1, 2020. On July 10, 2018, the Board of Directors increased the share repurchase authorization under the Program to $200 million. On January 31, 2019, the Board of Directors further increased the share repurchase authorization under the Program to $300 million. The Company may repurchase shares of its common stock through open market and privately negotiated transactions at prices deemed appropriate by management. The Company has entered into a written trading plan under Rule 10b5-1 of the Exchange Act to facilitate repurchases under the Program. The Program may be suspended or discontinued at any time and will be funded using the Company's available cash, cash equivalents and short-term investments. The timing and amount of repurchase transactions under the Program depend on market conditions as well as corporate and regulatory considerations.

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Item 6. - EXHIBITS

Exhibit No.	Description
31.1	Certification of Fusen Chen, Chief Executive Officer of Kulicke and Soffa Industries, Inc., pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Lester Wong, Chief Financial Officer of Kulicke and Soffa Industries, Inc., pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act as adopted pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Fusen Chen, Chief Executive Officer of Kulicke and Soffa Industries, Inc., pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Lester Wong, Chief Financial Officer of Kulicke and Soffa Industries, Inc., pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101.INS).
*	This exhibit shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section. Such exhibit shall not be deemed incorporated into any filing under the Securities Act or the Exchange Act.

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.

		KULICKE AND SOFFA INDUSTRIES, INC.
Date: April 30, 2020	By:	/s/ LESTER WONG
		Lester Wong
		Senior Vice President and Chief Financial Officer

EXHIBIT INDEX

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Exhibit 31.1

CERTIFICATION

I, Fusen Chen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Kulicke and Soffa Industries, Inc.;

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

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

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

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

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: April 30, 2020	By:	/s/ FUSEN CHEN
		Fusen Chen
		President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Lester Wong, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Kulicke and Soffa Industries, Inc.;

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

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

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

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

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: April 30, 2020	By:	/s/ LESTER WONG
		Lester Wong
		Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Fusen Chen, President and Chief Executive Officer of Kulicke and Soffa Industries, Inc., do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. the Quarterly Report on Form 10-Q of Kulicke and Soffa Industries, Inc. for the period ended March 28, 2020 (the " March 28, 2020 Form 10-Q"), as filed with the Securities and Exchange Commission, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

2. the information contained in the March 28, 2020 Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Kulicke and Soffa Industries, Inc.

Date: April 30, 2020	By:	/s/ FUSEN CHEN
		Fusen Chen
		President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Lester Wong, Senior Vice President and Chief Financial Officer of Kulicke and Soffa Industries, Inc., do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. the Quarterly Report on Form 10-Q of Kulicke and Soffa Industries, Inc. for the period ended March 28, 2020 (the " March 28, 2020 Form 10-Q"), as filed with the Securities and Exchange Commission, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

2. the information contained in the March 28, 2020 Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Kulicke and Soffa Industries, Inc.

Date: April 30, 2020	By:	/s/ LESTER WONG
		Lester Wong
		Senior Vice President and Chief Financial Officer