



**CREATING VALUE  
DELIVERING RESULTS**



## **VISION**

The leading technology and service provider of innovative interconnect solutions enabling a smart future.

## **COMPANY**

Kulicke & Soffa is a leading provider of semiconductor and electronic assembly solutions serving the global automotive, consumer, communications, computing and industrial markets. K&S prides itself 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.



## FELLOW SHAREHOLDERS

Over the long-term, prudent market expansion, new product execution and direct shareholder returns provide a powerful combination of value creation and delivery.

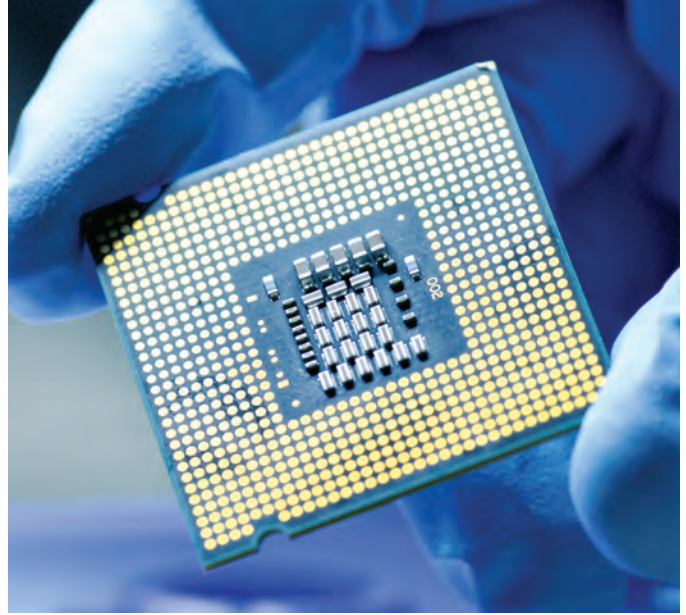
While all industry cycles are unique, fiscal 2019 was distinct from some of the previous downturns. Trade tensions, a shifting global supply chain and general softness in the broad semiconductor industry created multiple challenges across many fronts, although we continued to expand our served markets and gain traction on new growth prospects. Lean operations, ongoing development and an aggressive shareholder return philosophy have allowed us to exit fiscal 2019 as a more adaptive and diversified organization with significantly enhanced growth potential.

Over recent years, we have fundamentally transformed the company and increased our potential for long-term value creation by increasing the markets we serve, while also expanding our value delivery methods. Our value creation strategy has been further optimized through organizational refinements, external partnerships and an increased pace and focus of development. In parallel, we have also dramatically increased our shareholder returns through the dividend and share repurchase programs. Driven by the inherent leverage of our operating model, we are well positioned for fundamental financial performance enhancements as we continue to tactically execute toward our long-term strategy.

## VALUE CREATION

Our dominant core market positions, ability to target new market opportunities and rapidly develop competitive solutions are essential elements in this strategy for creating meaningful and sustainable long-term value.

Primarily, our established positions in ball bonding, wedge bonding and electronics assembly provide a meaningful platform for growth within consumer, industrial and automotive markets. A collective equipment installed base of over 110,000 systems, covering the majority of the world's semiconductor, LED and automotive providers highlights how embedded K&S tools are in the marketplace.



## A ROBUST GROWTH PLATFORM

Kulicke & Soffa continues to actively pursue tactical and strategic initiatives to seize served-market opportunities while more broadly expanding the markets it serves. A well-established and growing core-businesses, development excellence and thoughtful capital allocation have proven to be essential elements to create and deliver value in a sustainable and meaningful way.

▼  
**4.5<sup>x</sup>**

growth of ball-bonding profits (trailing five-year), over the prior ten years. Established positions in ball bonding, wedge bonding, electronics assembly and APS provide critical operational, sales and technology advantages supporting customer engagement, operating leverage potential and competitiveness of its new offerings.

Specifically, our market-leading ball-bonder business continues to be an essential cornerstone in the semiconductor manufacturing process. Over the last decade this sizable ball-bonding business has continued to provide a solid growth platform while also delivering meaningful improvements in operating profits. As the most cost-effective packaging solution for the majority of semiconductor applications, wire bonding continues to be essential in addressing new industry challenges such as stacked and multichip packages, novel approaches to shielding requirements, efficient lighting and is increasingly deployed in automotive applications such as electronic control systems, sensing, and battery assembly. Our large and diverse base of customers, internal and external distribution channels, and R&D competencies provide a robust foundation for growth of our new solutions.

Next, we have made fundamental changes to the way we identify and pursue new growth opportunities, increasing the pace and focus of our sizable development efforts. This change has largely been attributed to an increased engagement on customer-driven market requirements,

external partnerships and a more thorough and enhanced business development funneling process. Over the past few years, we have aligned our R&D roadmaps much closer to the market and extended our market reach by working more intimately with major customers and our close network of external partners. These key relationships have inherently reduced development risk, allowing for rapid deployment of new, highly competitive and market-relevant solutions.

Our dedicated and performance-focused global research and development team of 550 employees with an average tenure of over 11 years, is core to our historic success and central to our strategic roadmap. The 2017 organizational realignment has further enhanced our growth prospects by empowering individual businesses with increased discretion over specific development initiatives. This reorganization has increased development efficiency, customer engagement, and profitability while improving our long-term product roadmaps. These benefits have been demonstrated through the cadence of new product introductions, enhanced share gains in high-volume general lighting LED, expanded opportunities in



7

new capital equipment solutions released over the past two fiscal years highlights an improved development cadence that has enhanced core-market competitiveness, broadened advanced packaging exposure and provided access to the emerging and high-potential display market.

84%

of free-cash-flow generated over the past five years, has been returned to investors. This effort has reduced share count by 17.5% and provided \$47 million of dividend payments directly to investors, through fiscal year 2019. The opportunistic repurchase program and consistent dividend payments are cornerstones of its capital allocation strategy.

automotive and entry into the emerging mini and micro LED space. Over the past two years, we have introduced seven new and competitive equipment offerings that are increasingly aligned with the needs of high-potential market opportunities such as Automotive, Advanced Packaging, and LED. In addition to the growth in our core semiconductor markets, we anticipate these specific end markets will grow dramatically, delivering a new and sustainable level of diversification and profitability.

**VALUE DELIVERY**

Over the past five years, we generated approximately \$408 million of free cash flow and reduced shares outstanding by over 17%. Over this period, direct shareholder returns, through share repurchases and dividends totaled \$342 million, of which approximately \$132 million, nearly 40%, was deployed in fiscal 2019 alone.

We believe the best path to long-term value delivery is through fundamental valuation expansion, necessitated through the contribution of meaningful free cash flow generated by our new market opportunities. We also

believe that our current business model generates adequate profits to support these new growth prospects while also providing the opportunity for direct shareholder returns through a meaningful dividend and also through ongoing and opportunistic open market share repurchases.

Over the long-term, prudent market expansion, new product execution, and direct shareholder returns provide a powerful combination of value creation and delivery.

We appreciate your support as we continue our path toward this fundamental, multifaceted growth strategy.

Sincerely,

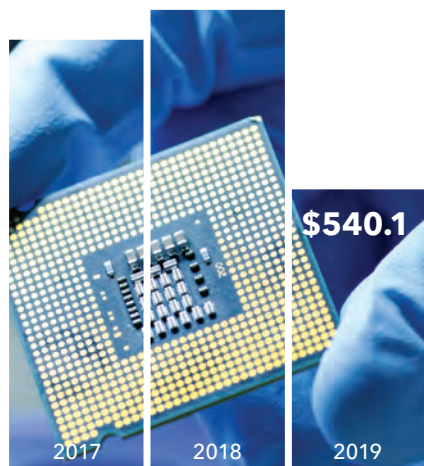
**FUSEN E. CHEN**

President and Chief Executive Officer

## FINANCIAL HIGHLIGHTS

Fiscal Year (in thousands, except per share amounts)	2015	2016	2017	2018	2019
<b>STATEMENT OF OPERATIONS DATA:</b>					
Net revenue	\$ 536,471	\$ 627,192	\$ 809,041	\$ 889,121	<b>\$540,052</b>
Research and development	90,033	92,374	100,203	119,621	<b>116,169</b>
Selling, general, administrative and misc	123,322	134,709	168,808	123,188	<b>116,811</b>
Interest income, net	454	2,211	5,432	10,917	<b>13,077</b>
Income tax expense / (benefit)	(12,867)	7,709	(7,394)	120,744	<b>22,910</b>
Net income	\$ 51,912	\$ 48,455	\$ 126,099	\$ 56,676	<b>\$ 11,653</b>
Net Income per share, basic	\$ 0.69	\$ 0.69	\$ 1.78	\$ 0.82	<b>\$ 0.18</b>
Net Income per share, diluted	\$ 0.69	\$ 0.68	\$ 1.75	\$ 0.80	<b>\$ 0.18</b>
Cash dividends declared per share	\$ -	\$ -	\$ -	\$ 0.24	<b>\$ 0.48</b>
<b>BALANCE SHEET DATA:</b>					
Cash, cash equivalents and short-term investments	\$ 498,614	\$ 547,907	\$ 608,410	\$ 614,148	<b>\$ 593,184</b>
Working capital	624,659	654,983	760,401	813,197	<b>719,109</b>
Property, plant and equipment	53,234	50,342	67,762	76,067	<b>72,370</b>
Total assets	904,446	982,444	1,171,107	1,185,740	<b>1,079,616</b>
Shareholders' equity	\$ 760,912	\$ 799,524	\$ 920,030	\$ 880,207	<b>\$ 769,063</b>
<b>OTHER SELECTED DATA:</b>					
Capital expenditures	\$ 9,519	\$ 6,301	\$ 25,688	\$ 20,441	<b>\$ 11,829</b>
Depreciation and amortization expense	\$ 18,972	\$ 16,230	\$ 16,257	\$ 19,015	<b>\$ 20,304</b>

### REVENUE (\$M)



### FREE CASH FLOW (\$M)



### RETURN TO SHAREHOLDERS (\$M)



Notes: The financial data presented above should be read in conjunction with the consolidated financial statements, related notes and other financial information included and incorporated by reference herein. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8. "Financial Statements and Supplementary Data" of our Annual Report on Form 10-K for the fiscal year ended September 28, 2019 included herein.

In addition to historical information, this report, including the letter to shareholders, contains statements relating to future events or our future results. These statements are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are subject to the safe harbor provisions created by these statutes. See Item 1A. "Risks Factors" and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended September 28, 2019 for a discussion of important factors that could cause actual results to differ significantly from those expressed or implied by forward-looking statements contained in this report.



**CREATING VALUE  
DELIVERING RESULTS**

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

**FORM 10-K**

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

For the fiscal year ended September 28, 2019

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_ .

*Commission File No. 0-121*

**KULICKE AND SOFFA INDUSTRIES, INC.**

(Exact name of registrant as specified in its charter)

**Pennsylvania**

(State or other jurisdiction of incorporation)

**23-1498399**

(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)

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

N/A

(Former name, former address and former fiscal year, if changed since last report)

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 if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes

No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No



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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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 March 30, 2019, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$1,444.9 million based on the closing sale price as reported on The NASDAQ Global Market (reference is made to Part II, Item 5 herein for a statement of assumptions upon which this calculation is based).

#### **APPLICABLE ONLY TO CORPORATE REGISTRANTS**

As of November 8, 2019 there were 63,028,039 shares of the registrant's common stock, without par value, outstanding.

#### **Documents Incorporated by Reference**

Portions of the registrant's Proxy Statement for the 2020 Annual Meeting of Shareholders to be filed on or about January 4, 2020 are incorporated by reference into Part II, Item 5 and Part III, Items 10, 11, 12, 13 and 14 herein of this Report. Such Proxy Statement, except for the parts therein which have been specifically incorporated by reference, shall not be deemed "filed" for the purposes of this Report on Form 10-K.

**KULICKE AND SOFFA INDUSTRIES, INC.**  
**2019 Annual Report on Form 10-K**  
**September 28, 2019**  
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## PART I

### 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, 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):*

- *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, 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 Annual Report on Form 10-K for the fiscal year ended September 28, 2019 (the "Annual Report" or "Form 10-K") and our other reports and registration statements filed from time to time with the Securities and Exchange Commission.*

*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. Future events and actual results, performance and achievements could differ materially from those set forth in, contemplated by or underlying the forward-looking statements, which speak only as of the date on which they were made. Except as required by law, we assume no obligation to update or revise any forward-looking statement to reflect actual results or changes in, or additions to, the factors affecting such forward-looking statement. Given those risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictions of actual results.*

### Item 1. BUSINESS

Kulicke and Soffa Industries, Inc. ("We", the "Company" or "K&S") designs, manufactures and sells 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. 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.

K&S was incorporated in Pennsylvania in 1956. Our principal offices are located at 23A Serangoon North Avenue 5, #01-01, Singapore 554369 and our telephone number in the United States is (215) 784-6000. We maintain a website with the address [www.kns.com](http://www.kns.com). We are not including the information contained on our website as a part of, or incorporating it by reference into, this filing. We make available free of charge (other than an investor's own Internet access charges) on or through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to these reports, as soon as reasonably practicable after the material is electronically filed with or otherwise furnished to the Securities and Exchange Commission ("SEC"). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports are also available on the SEC website at [www.sec.gov](http://www.sec.gov) and at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330.

Our year end for each of fiscal 2019, 2018 and 2017 was September 28, 2019, September 29, 2018, and September 30, 2017, respectively.

## **Key Events in Fiscal 2019**

### ***Share 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 Company's 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 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 fiscal year ended September 28, 2019, the Company repurchased a total of 4.7 million shares of common stock at a cost of \$100.5 million. As of September 28, 2019, our remaining share repurchase authorization under the Program was approximately \$97.1 million.

### ***Dividends***

On August 7, 2019, May 20, 2019, February 28, 2019 and December 12, 2018, the Board of Directors declared a quarterly dividend \$0.12 per share of common stock. During the fiscal year ended September 28, 2019, the Company declared dividends of \$0.48 per share of common stock. 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 stockholders.

### **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. In particular, trade tensions between the U.S. and China have been escalating since 2018, with U.S. tariffs on Chinese goods and retaliatory Chinese tariffs on U.S. goods. These have resulted in uncertainties in the semiconductor, LED, memory and automotive markets with a resulting softening of demand. While the Company anticipates long-term growth in semiconductor consumption, the softening in demand, which began in the fourth quarter of fiscal 2018, is expected to continue through fiscal 2020.

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 Aftermarket Products and Services ("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 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 September 28, 2019, our total cash, cash equivalents, restricted cash and short-term investments, net of the bank overdraft line of credit, were \$532.3 million, a \$81.9 million decrease from the prior fiscal year end. Our bank overdraft line of credit 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 tools available for the interconnect processes. We believe our technology leadership contributes to the strong market positions of our ball bonder, wedge bonder and 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 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 platform (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<sup>PS</sup> 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 will increase synergies between the various engineering product groups. Furthermore, we continually research adjacent market segments where our technologies could be used. Many of these initiatives are in the early stages of development and some have 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 today 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.

During fiscal 2019, we have entered into a new market, miniLED for display backlighting and direct emitting display, with the recent launch of PIXALUX™. The PIXALUX™ is a very high speed die placement equipment, and one of the most mass production 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. The usage of miniLED is expected to grow significantly over the next few years.

We bring the same technology focus to our tools 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, tools are an integral part of their process capability. We believe our unique ability to simultaneously develop both equipment and tools is a core strength supporting our products' technological differentiation.

### Products and Services

The Company operates two segments: Capital Equipment and APS. The following table reflects net revenue by segment for fiscal 2019, 2018, and 2017:

	Fiscal					
	2019		2018		2017	
	Net revenues	% of total net revenue	Net revenues	% of total net revenue	Net revenues	% of total net revenue
<i>(dollar amounts in thousands)</i>						
Capital Equipment	\$ 386,820	71.6%	\$ 719,390	80.9%	\$ 651,934	80.6%
APS	153,232	28.4%	169,731	19.1%	157,107	19.4%
	<u>\$ 540,052</u>	<u>100.0%</u>	<u>\$ 889,121</u>	<u>100.0%</u>	<u>\$ 809,041</u>	<u>100.0%</u>

See Note 14 to our consolidated financial statements included in Item 8 of this report for our financial results by segment.

### Customers

Our major customers include IDMs and OSATs, industrial manufacturers and automotive electronics suppliers. Revenue from our customers may vary significantly from year-to-year based on their respective capital investments, operating expense budgets, and overall industry trends. There was no customer with sales representing more than 10% of net revenue in fiscal 2019.

The following table reflects our top ten customers, based on net revenue, for each of the last three fiscal years:

Fiscal 2019	Fiscal 2018	Fiscal 2017
1 Super Power International Ltd (2)	1 Haoseng Industrial Co., Ltd. (1)(2)	1 Haoseng Industrial Co., Ltd. (1)(2)
2 Micron Technology Incorporated	2 ASE Industrial Holding (3)	2 Siliconware Precision Industries Ltd. (3)
3 First Technology China, Ltd. (2)	3 Super Power International Ltd (2)	3 Advanced Semiconductor Engineering (3)
4 ASE Industrial Holding (3)	4 Micron Technology Incorporated	4 Amkor Technology Inc.
5 Xinye Electronics. Co (2)	5 First Technology China, Ltd. (2)	5 Super Power International Ltd (2)
6 Forehope Electronic Co., Ltd	6 Tesla Motors	6 Samsung
7 Infineon Technologies	7 Samsung	7 First Technology China, Ltd. (2)
8 ST Microelectronics	8 Texas Instruments, Inc.	8 LG Innotek Co. Ltd.
9 On Semiconductor	9 Xinye Electronics. Co (2)	9 Texas Instruments, Inc.
10 Haoseng Industrial Co., Ltd. (2)	10 Infineon Technologies	10 Xinye Electronics. Co (2)

(1) Represents more than 10% of our net revenue for the applicable fiscal year.

(2) Distributor of our products.

(3) Siliconware Precision Industries Ltd. and Advanced Semiconductor Engineering merged in fiscal 2018 to form ASE Industrial Holding.

## Sales and Customer Support

We believe long-term customer relationships are critical to our success, and comprehensive sales support and customer support are an important means of establishing those relationships. To maintain these relationships, we primarily utilize our direct sales force, as well as distribution channels such as agents and distributors, depending on the product, region, or end-user application. In all cases, our goal is to position our sales support and customer support resources near our customers' facilities so as to provide support for customers in their own language and consistent with local customs. Our sales support and customer support resources are located primarily in Singapore, Israel, Taiwan, China, Korea, Malaysia, the Philippines, Japan, Thailand, the U.S., Germany, Mexico, Switzerland and the Netherlands. Supporting these local resources, we have technology centers offering additional process expertise in Singapore, China, Switzerland, Israel, the U.S. and the Netherlands.

By establishing relationships with semiconductor manufacturers, OSATs, and vertically integrated manufacturers of electronic systems, we gain insight into our customers' future semiconductor packaging strategies. In addition, we also send our products and equipment to customers or potential customers for trial and evaluation. These insights assist us in our efforts to develop products and processes that address our customers' future assembly requirements.

## Backlog

Our backlog consists of customer orders scheduled for shipment within the next twelve months. A majority of our orders are subject to cancellation or deferral by our customers with limited or no penalties. Also, customer demand for our products can vary dramatically without prior notice. Because of the volatility of customer demand, possibility of customer changes in delivery schedules or cancellations and potential delays in product shipments, our backlog as of any particular date may not be indicative of net revenue for any succeeding period.

The following table reflects our backlog as of September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	As of	
	September 28, 2019	September 29, 2018
Backlog	\$ 104,711	\$ 141,665

## Manufacturing

We believe excellence in manufacturing can create a competitive advantage, both by producing at lower costs and by providing superior responsiveness to changes in customer demand. To achieve these goals, we manage our manufacturing operations through a single organization and believe that fewer, larger factories allow us to capture economies of scale and generate cost savings through lower manufacturing costs.

Our equipment manufacturing activities consist mainly of integrating outsourced parts and subassemblies and testing finished products to customer specifications. We largely utilize an outsource model, allowing us to minimize our fixed costs and capital expenditures. For certain low-volume, high customization parts, we manufacture subassemblies ourselves. Just-in-time inventory management has reduced our manufacturing cycle times and lowered our on-hand inventory requirements. Raw materials used in our equipment manufacturing are generally available from multiple sources; however, many outsourced parts and components are only available from a single or limited number of sources.

Our ball bonder, wedge bonder, AT Premier, APAMA and Katalyst bonder manufacturing and assembly is done at our facility in Singapore. Our Hybrid and Electronic Assembly solutions manufacturing and assembly is done at our facility in the Netherlands. We have ISO 9001 and ISO 14001 certifications for our equipment manufacturing facilities in Singapore and the Netherlands.

We manufacture dicing blades, capillaries and a portion of our bonding wedge inventory at our facility in China. The capillaries are made using blanks produced at our facilities in China and Israel. We both produce and outsource the production of our bonding wedges. Both the China and Israel facilities are ISO 9001 certified. The China facility is also ISO 14001 and ISO 18001 certified.

## Research and Product Development

Many of our customers generate technology roadmaps describing their projected packaging technology requirements. Our research and product development activities are focused on delivering robust production solutions to those projected requirements. We accomplish this by regularly introducing improved versions of existing products or by developing next-generation products. We follow this product development methodology in all our major product lines.

## **Intellectual Property**

Where circumstances warrant, we apply for patents on inventions governing new products and processes developed as part of our ongoing research, engineering, and manufacturing activities. We currently hold a number of U.S. patents, many of which have foreign counterparts. We believe the duration of our patents often exceeds the commercial life cycles of the technologies disclosed and claimed in the patents. Additionally, we believe much of our important technology resides in our trade secrets and proprietary software.

## **Competition**

The market for semiconductor equipment and packaging materials products is intensely competitive. Significant competitive factors in the semiconductor equipment market include price, speed/throughput, production yield, process control, delivery time, innovation, quality and customer support, each of which contribute to lower the overall cost per package being manufactured. Our major equipment competitors are ASM Pacific Technology, BE Semiconductor Industries N.V. and Shinkawa Ltd.

Significant competitive factors in the semiconductor packaging materials industry include performance, price, delivery, product life, and quality. Our significant tools competitors are PECO, Disco Corporation and Small Precision Tools.

In each of the markets we serve, we face competition and the threat of competition from established competitors and potential new entrants, some of which may have greater financial, engineering, manufacturing, and marketing resources.

## **Environmental Matters**

We are subject to various federal, state, local and foreign laws and regulations governing, among other things, the generation, storage, use, emission, discharge, transportation and disposal of hazardous materials and the health and safety of our employees. In addition, we are subject to environmental laws which may require investigation and cleanup of any contamination at facilities we own or operate or at third-party waste disposal sites we use or have used.

We have incurred in the past, and expect in the future to incur costs to comply with environmental laws. We are not, however, currently aware of any material costs or liabilities relating to environmental matters, including any claims or actions under environmental laws or obligations to perform any cleanups at any of our facilities or any third-party waste disposal sites, that we expect to have a material adverse effect on our business, financial condition or operating results. However, it is possible that material environmental costs or liabilities may arise in the future.

## **Business Continuity Management Plan**

We have developed and implemented a global Business Continuity Management Plan ("Plan") for our business operations. The Plan is designed to facilitate the prompt resumption of our business operations and functions arising from an event which impacts or potentially impacts our business operations. As the scale, timing, and impact of disasters and disruptions are unpredictable, the Plan has been designed to be flexible in responding to actual events as they occur. The Plan provides a structured framework for safeguarding our employees and property, making a financial and operational assessment, protecting our books and records, perpetuating critical business functions, and enabling the continuation of customer transactions.

## **Employees**

As of September 28, 2019, we had 2,469 regular full-time employees and 145 temporary workers worldwide.



## Item 1A. RISK FACTORS

### Risks Related to Our Business and Industry

***Our operating results and financial condition 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 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. There can be no assurances regarding levels of demand for our products and we believe historic industry-wide volatility will persist.

***Unpredictable spending by our customers due to uncertainties in the macroeconomic environment could adversely affect our net revenue and profitability.***

We depend upon demand from our customers including IDMs and OSATs, industrial manufacturers and automotive electronics suppliers. Our net revenue and profitability is based upon our customers' anticipated sales. Reductions or other fluctuations in their spending as a result of uncertain conditions in the macroeconomic environment, including from government, economic or fiscal instability, restricted global credit conditions, reduced demand, unbalanced inventory levels, fluctuations in interest rates, higher energy prices, or other conditions, could adversely affect our net revenue and profitability. The impact of general economic slowdowns could make our customers cautious and delay orders until the economic environment becomes clearer.

***The semiconductor industry is volatile with sharp periodic downturns and slowdowns. Cyclical industry downturns are made worse by volatile global economic conditions.***

Our operating results are significantly affected by the capital expenditures of semiconductor manufacturers, both IDMs and OSATs. Expenditures by our customers depend on the current and anticipated market demand for semiconductors and products that use semiconductors, including mobile devices, personal computers, consumer electronics, telecommunications equipment, automotive components and other industrial products. Significant downturns in the market for semiconductor devices or in general economic conditions reduce demand for our products and can materially and adversely affect our business, financial condition and operating results.

The semiconductor industry is volatile, with periods of rapid growth followed by industry-wide retrenchment. These periodic downturns and slowdowns have adversely affected our business, financial condition and operating results. Downturns have been characterized by, among other things, diminished product demand, excess production capacity, and accelerated erosion of selling prices. Historically these downturns have severely and negatively affected the industry's demand for capital equipment, including assembly equipment and, to a lesser extent, tools. There can be no assurances regarding levels of demand for our products. In any case, we believe the historical volatility of our business, both upward and downward, will persist.

***We may experience increasing price pressure.***

Typically our average selling prices have declined over time. We seek to offset this decline by continually reducing our cost structure by consolidating operations in lower cost areas, reducing other operating costs, and by pursuing product strategies focused on product performance and customer service. These efforts may not be able to fully offset price declines; therefore, our financial condition and operating results may be materially and adversely affected.

***Our quarterly operating results fluctuate significantly and may continue to do so in the future.***

In the past, our quarterly operating results have fluctuated significantly. We expect that our quarterly results will continue to fluctuate. Although these fluctuations are partly due to the cyclical and volatile nature of the semiconductor industry, they also reflect other factors, many of which are outside of our control.

Some of the factors that may cause our net revenue and operating margins to fluctuate significantly from period to period are:

- market downturns;
- industry inventory level;
- the mix of products we sell because, for example:
  - certain lines of equipment within our business segments are more profitable than others; and
  - some sales arrangements have higher gross margins than others;
- canceled or deferred orders;
- seasonality;

- competitive pricing pressures may force us to reduce prices;
- higher than anticipated costs of development or production of new equipment models;
- the availability and cost of the components for our products;
- delays in the development and manufacture of our new products and upgraded versions of our products and market acceptance of these products when introduced;
- customers' delay in purchasing our products due to anticipation that we or our competitors may introduce new or upgraded products; and
- our competitors' introduction of new products.

Many of our expenses, such as research and development, selling, general and administrative expenses, and interest expense, do not vary directly with our net revenue. Our research and development efforts include long-term projects lasting a year or more, which require significant investments. In order to realize the benefits of these projects, we believe that we must continue to fund them even during periods when our revenue has declined. As a result, a decline in our net revenue would adversely affect our operating results as we continue to make these expenditures. In addition, if we were to incur additional expenses in a quarter in which we did not experience comparable increased net revenue, our operating results would decline. In a downturn, we may have excess inventory, which could be written off. Some of the other factors that may cause our expenses to fluctuate from period-to-period include:

- timing and extent of our research and development efforts;
- severance, restructuring, and other costs of relocating facilities;
- inventory write-offs due to obsolescence or other causes; and
- an increase in the cost of labor or materials.

Because our net revenue and operating results are volatile and difficult to predict, we believe consecutive period-to-period comparisons of our operating results may not be a good indication of our future performance.

***We may not be able to rapidly develop, manufacture and gain market acceptance of new and enhanced products required to maintain or expand our business.***

We believe our continued success depends on our ability to continuously develop and manufacture new products and product enhancements on a timely and cost-effective basis. We must introduce these products and product enhancements into the market in a timely manner in response to customers' demands for higher performance assembly equipment and leading-edge materials customized to address rapid technological advances in integrated circuits, and capital equipment designs. Our competitors may develop new products or enhancements to their products that offer improved performance and features, or lower prices which may render our products less competitive. The development and commercialization of new products require significant capital expenditures over an extended period of time, and some products we seek to develop may never become profitable. In addition, we may not be able to develop and introduce products incorporating new technologies in a timely manner that will satisfy our customers' future needs or achieve market acceptance.

***Substantially all of our sales and manufacturing operations are located outside of the U.S., and we rely on independent foreign distribution channels for certain product lines, all of which subject us to risks, including risks from changes in trade regulations, currency fluctuations, political instability and conflicts.***

Approximately 93.3%, 92.3%, and 92.9% of our net revenue for fiscal 2019, 2018, and 2017, respectively, was for shipments to customers located outside of the U.S., primarily in the Asia/Pacific region. In the Asia/Pacific region, our customer base is also becoming more geographically concentrated as a result of economic and industry conditions. Approximately 46.7%, 46.0% and 40.0% of our net revenue for the fiscal 2019, 2018, and 2017 was for shipments to customers located in China.

We expect our future performance to depend on our ability to continue to compete in foreign markets, particularly in the Asia/Pacific region. Some of these economies have been highly volatile, resulting in significant fluctuation in local currencies, and political and economic instability. These conditions may continue or worsen, which may materially and adversely affect our business, financial condition and operating results.

We also rely on non-U.S. suppliers for materials and components used in our products, and substantially all of our manufacturing operations are located in countries other than the U.S. We manufacture our ball, wedge and APAMA bonders in Singapore, our Hybrid and Electronic Assembly solutions in the Netherlands, our dicing blades, capillaries and bonding wedges in China and capillary blanks in Israel and China. In addition, our corporate headquarters is in Singapore and we have sales, service and support personnel in Singapore, Israel, Taiwan, China, Korea, Malaysia, the Philippines, Japan, Thailand, Vietnam, the U.S., Germany, Mexico, Switzerland and the Netherlands. We also rely on independent foreign distribution channels for certain of our product lines.

As a result, a major portion of our business is subject to the risks associated with international, and particularly Asia/Pacific, commerce, such as:

- risks of war and civil disturbances or other events that may limit or disrupt manufacturing and markets;
- seizure of our foreign assets, including cash;
- longer payment cycles in foreign markets;
- foreign exchange restrictions and capital controls;
- restrictions or significant taxes on the repatriation of our assets, including cash;
- difficulties of staffing and managing dispersed international operations;
- changes in our structure or tax incentive arrangements;
- possible disagreements with tax authorities;
- episodic events outside our control such as, for example, outbreaks of influenza or other illnesses;
- natural disasters such as earthquakes, fires or floods;
- tariff and currency fluctuations;
- changing political conditions;
- labor work stoppages and strikes in our factories or the factories of our suppliers;
- foreign governments' monetary policies and regulatory requirements;
- less protective foreign intellectual property laws;
- new laws and regulations; and
- legal systems which are less developed and may be less predictable than those in the U.S.

In addition, there is a potential risk of conflict and instability in the relationship between Taiwan and China. Conflict or instability could disrupt the operations of our customers and/or suppliers in both Taiwan and China. Additionally, our manufacturing operations in China could be disrupted by any conflict.

Our international operations also depend upon favorable trade relations between the U.S. and those foreign countries in which our customers, subcontractors and materials suppliers have operations. A protectionist trade environment in either the U.S. or those foreign countries in which we do business, such as a change in the current tariff structures, export compliance or other trade policies, may materially and adversely affect our ability to sell our products in foreign markets.

The U.S. and several other countries have levied tariffs on certain goods and have introduced other trade restrictions that may impact our customer investment in manufacturing equipment, reduce the competitiveness of our products, or inhibit our ability to sell products or purchase necessary equipment and supplies. In particular, trade tensions between the U.S. and China have been escalating since 2018, with U.S. tariffs on Chinese goods and retaliatory Chinese tariffs on U.S. goods. We cannot predict what further actions may ultimately be taken with respect to tariffs or trade relations between the U.S. and other countries, what products may be subject to such actions, or what actions may be taken by other countries in response. Further changes in trade policy, tariffs, additional taxes, restrictions on exports or other trade barriers, or restrictions on supplies, equipment, and raw materials, may limit our ability to produce products, increase our selling and/or manufacturing costs, reduce the competitiveness of our products, or inhibit our ability to sell products or purchase necessary equipment and supplies, which could have a material adverse effect on our business, results of operations, or financial condition.

***Increased labor costs and competition for qualified personnel may reduce the efficiency of our flexible manufacturing model and adversely impact our operating results.***

There is some uncertainty with respect to the pace of rising labor costs in the various countries in which we operate. In addition, there is substantial competition in China, Singapore, Israel and the Netherlands for qualified and capable personnel, which may make it difficult for us to recruit and retain qualified employees. If we are unable to staff sufficient personnel at our China, Singapore, Israel and the Netherlands facilities or if there are increases in labor costs that we are unable to recover in our pricing to our customers, we may experience increased manufacturing costs, which would adversely affect our operating results.

***We are exposed to fluctuations in currency exchange rates that could negatively impact our financial results and cash flows.***

Because most of our foreign sales are denominated in U.S. dollar or Euro, an increase in value of the U.S. dollar or the Euro against foreign currencies will make our products more expensive than those offered by some of our foreign competitors. In addition, a weakening of the U.S. dollar against other currencies other than the Euro could make our costs in non-U.S. locations more expensive to fund. Our ability to compete overseas may therefore be materially and adversely affected by the fluctuations of the U.S. dollar or the Euro against other currencies.

Because nearly all of our business is conducted outside the U.S., we face exposure to adverse movements in foreign currency exchange rates which could have a material adverse impact on our financial results and cash flows. Historically, our primary exposures have related to net working capital exposures denominated in currencies other than the foreign subsidiaries' functional currency, and remeasurement of our foreign subsidiaries' net monetary assets from the subsidiaries' local currency into the subsidiaries' functional currency. In general, an increase in the value of the U.S. dollar could require certain of our foreign subsidiaries to record translation and remeasurement gains. Conversely, a decrease in the value of the U.S. dollar could require certain of our foreign subsidiaries to record losses on translation and remeasurement. An increase in the value of the U.S. dollar could increase the cost to our customers of our products in those markets outside the U.S. where we sell in U.S. dollars, and a weakened U.S. dollar could increase the cost of local operating expenses and procurement of raw materials, both of which could have an adverse effect on our cash flows. Our primary exposures include the Singapore Dollar, Chinese Yuan, Japanese Yen, Swiss Franc, Philippine Peso, Thai Baht, Taiwan Dollar, South Korean Won, Israeli Shekel and Euro. Although we from time to time have entered into foreign exchange forward contracts to hedge certain foreign currency exposure of our operating expenses, 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 flows.

***We may not be able to continue to consolidate manufacturing and other facilities or entities without incurring unanticipated costs and disruptions to our business.***

As part of our ongoing efforts to drive further efficiency, we may consolidate our manufacturing and other facilities or entities. Should we consolidate, we may experience unanticipated events, including the actions of governments, suppliers, employees or customers, which may result in unanticipated costs and disruptions to our business.

***Our business depends on attracting and retaining management, marketing and technical employees as well as on the succession of senior management.***

Our future success depends on our ability to hire and retain qualified management, marketing, finance, accounting and technical employees, including senior management. Experienced personnel with the relevant and necessary skill sets in our industry are in high demand and competition for their talents is intense, especially in Asia, where most of the Company's key personnel are located. If we are unable to continue to attract and retain the managerial, marketing, finance, accounting and technical personnel we require, our business, financial condition and operating results may be materially and adversely affected.

Effective succession planning is also important to our long-term success. Failure to ensure effective transfer of knowledge and smooth transitions involving senior management could hinder our strategic planning and execution. From time to time, senior management or other key employees may leave our company. While we strive to reduce the negative impact of such changes, the loss of any key employee could result in significant disruptions to our operations, including adversely affecting the timeliness of product releases, the successful implementation and completion of company initiatives, the effectiveness of our disclosure controls and procedures and our internal control over financial reporting, and the results of our operations. In addition, hiring, training, and successfully integrating replacement critical personnel could be time consuming, may cause additional disruptions to our operations, and may be unsuccessful, which could negatively impact future revenues.

***Difficulties in forecasting demand for our product lines may lead to periodic inventory shortages or excesses.***

We typically operate our business with limited visibility of future demand. As a result, we sometimes experience inventory shortages or excesses. We generally order supplies and otherwise plan our production based on internal forecasts for demand. We have in the past failed, and may again in the future fail, to accurately forecast demand for our products. This has led to, and may in the future lead to, delays in product shipments or, alternatively, an increased risk of inventory obsolescence. If we fail to accurately forecast demand for our products, our business, financial condition and operating results may be materially and adversely affected.

***Alternative packaging technologies may render some of our products obsolete and materially and adversely affect our overall business and financial results.***

Alternative packaging technologies have emerged that may improve device performance or reduce the size of an integrated circuit package, as compared to traditional wire bonding. These technologies include flip chip and WLP. Some of these alternative technologies eliminate the need for wires to establish the electrical connection between a die and its package. The semiconductor industry may, in the future, shift a significant part of its volume into alternative packaging technologies which do not employ our products. If a significant shift to alternative packaging technologies to a technology not offered by us were to occur, demand for our equipment and related packaging materials may be materially and adversely affected. Given the lack of a significant alternate revenue stream other than wire bonding, a reduced demand for our equipment could materially and adversely affect our financial results.

***Because a small number of customers account for most of our sales, our net revenue could decline if we lose a significant customer.***

The semiconductor manufacturing industry is highly concentrated, with a relatively small number of large semiconductor manufacturers and their subcontract assemblers and vertically integrated manufacturers of electronic systems purchasing a substantial portion of our semiconductor assembly equipment and packaging materials. Sales to a relatively small number of customers have historically accounted for a significant percentage of our net revenue. There was no customer with sales representing more than 10% of net revenue in fiscal 2019. Sales to our ten largest customers comprised 53.8% and 53.4% of our net revenue for fiscal 2019 and fiscal 2018, respectively.

We expect a small number of customers will continue to account for a high percentage of our net revenue for the foreseeable future. Thus, our business success depends on our ability to maintain strong relationships with our customers. Any one of a number of factors could adversely affect these relationships. If, for example, during periods of escalating demand for our equipment, we were unable to add inventory and production capacity quickly enough to meet the needs of our customers, they may turn to other suppliers making it more difficult for us to retain their business. If we lose orders from a significant customer, or if a significant customer reduces its orders substantially, these losses or reductions may materially and adversely affect our business, financial condition and operating results.

***We maintain a backlog of customer orders that is subject to cancellation, reduction or delay in delivery schedules, which may result in lower than expected revenues.***

We manufacture products primarily pursuant to purchase orders for current delivery or to forecast, rather than pursuant to long-term supply contracts. As a result, we must commit resources to the manufacture of products without binding purchase commitments from customers. The semiconductor industry is occasionally subject to double-booking and rapid changes in customer outlooks or unexpected build ups of inventory in the supply channel as a result of shifts in end market demand and macro-economic conditions. Accordingly, many of these purchase orders or forecasts may be revised or canceled without penalty. Even in cases where our standard terms and conditions of sale or other contractual arrangements do not permit a customer to cancel an order without penalty, we may from time to time accept cancellations to maintain customer relationships or because of industry practice, custom or other factors. Our inability to sell products after we devote significant resources to them could have a material adverse effect on both our levels of inventory and revenues. While we currently believe our inventory levels are appropriate for the current economic environment, continued global economic uncertainty may result in lower than expected demand.

***We send products and equipment to customers or potential customers for trial, evaluation or other purposes which may result in retrofit charges, impairments or write-down of inventory value if the products and equipment are not subsequently purchased by the customers.***

From time to time we send certain products and equipment to customers or potential customers for testing, evaluation or other purposes in advance of receiving any confirmation of purchase or purchase orders. Such equipment may be at the customer location for an extended period of time per the agreements with these customers and potential customers. The customer may refuse to buy all or partial quantities of such product or equipment and return this back to us. As a result, we may incur charges to retrofit the machines or sell the machines as second hand at a lower price, and accordingly may have to record impairments on the returned inventory, all of which would adversely affect our operating results.

***Undetected problems in our products could directly impair our financial results.***

If flaws in design, production, assembly or testing of our products (by us or our suppliers) were to occur, we could experience a rate of failure in our products that would result in substantial repair, replacement or service costs and potential damage to our reputation. Continued improvement in manufacturing capabilities, control of material and manufacturing quality and costs and product testing are critical factors in our future growth. There can be no assurance that our efforts to monitor, develop, modify and implement appropriate tests and manufacturing processes for our products will be sufficient to permit us to avoid a rate of failure in our products that results in substantial delays in shipment, significant repair or replacement costs or potential damage to our reputation, any of which could have a material adverse effect on our business, results of operations or financial condition.

***Costs related to product defect and errata may harm our results of operations and business.***

Costs of product defects and errata (deviations from product specifications) due to, for example, problems in our design and manufacturing processes, or those of our suppliers, could include:

- writing off the value of inventory;
- disposing of products that cannot be fixed;
- retrofitting products that have been shipped;
- providing product replacements or modifications; and
- defending against litigation.

These costs could be large and may increase expenses and lower our operating profits. Our reputation with customers or end users could be damaged as a result of product defects and errata, and product demand could be reduced. These factors could harm our business and financial results.

***We depend on our suppliers, including sole source suppliers, for critical raw materials, components and subassemblies. If our suppliers do not deliver their products to us, we would be unable to deliver our products to our customers.***

Our products are complex and require raw materials, components and subassemblies having a high degree of reliability, accuracy and performance. We rely on subcontractors to manufacture many of these components and subassemblies and we rely on sole source suppliers for certain key technology parts and raw materials. As a result, we are exposed to a number of significant risks, including:

- decreased control over the manufacturing process for components and subassemblies;
- changes in our manufacturing processes in response to changes in the market, which may delay our shipments;
- our inadvertent use of defective or contaminated raw materials;
- the relatively small operations and limited manufacturing resources of some of our suppliers, which may limit their ability to manufacture and sell subassemblies, components or parts in the volumes we require and at acceptable quality levels and prices;
- restrictions on our ability to rely on suppliers due to changes in trade regulation;
- the inability of suppliers to meet customer demand requirements during volatile cycles;
- reliability or quality issues with certain key subassemblies provided by single source suppliers as to which we may not have any short term alternative;
- shortages caused by disruptions at our suppliers and subcontractors for a variety of reasons, including work stoppage or fire, earthquake, flooding or other natural disasters;
- delays in the delivery of raw materials or subassemblies, which, in turn, may delay shipments to our customers;
- loss of suppliers as a result of consolidation of suppliers in the industry; and
- loss of suppliers because of their bankruptcy or insolvency.

If we are unable to deliver products to our customers on time and at expected cost for these or any other reasons, or we are unable to meet customer expectations as to cycle time, or we are unable to maintain acceptable product quality or reliability, our business, financial condition and operating results may be materially and adversely affected.

***Regulations related to “conflict minerals” may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.***

In 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the SEC adopted requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, regardless of whether these products are manufactured by third parties. These requirements require companies to conduct due diligence and disclose whether or not such minerals originate from the Democratic Republic of Congo and certain adjoining countries. These requirements could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices, including our products. In addition, since our supply chain is complex, we may not be able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free.

***We may acquire or divest businesses or enter into joint ventures or strategic alliances, which may materially affect our business, financial condition and operating results.***

We continually evaluate our portfolio of businesses and may decide to buy or sell businesses or enter into joint ventures or other strategic alliances. We may be unable to successfully integrate acquired businesses with our existing businesses and successfully implement, improve and expand our systems, procedures and controls to accommodate these acquisitions. These transactions place additional demands on our management and current labor force. Additionally, these transactions require significant resources from our legal, finance and business teams. In addition, we may divest existing businesses, which would cause a decline in revenue and may make our financial results more volatile. If we fail to integrate and manage acquired businesses successfully or to mitigate the risks associated with divestitures, joint ventures or other alliances, our business, financial condition and operating results may be materially and adversely affected.

***The market price of our common shares and our earnings per share may decline as a result of any acquisitions or divestitures.***

The market price of our common shares may decline as a result of any acquisitions or divestitures made by us if we do not achieve the perceived benefits of such acquisitions or divestitures as rapidly or to the extent anticipated by financial or industry analysts or if the effect on our financial results is not consistent with the expectations of financial or industry analysts. In addition, the failure to achieve expected benefits and unanticipated costs relating to our acquisitions could reduce our future earnings per share.

***We may be unable to continue to compete successfully in the highly competitive semiconductor equipment and packaging materials industries.***

The semiconductor equipment and packaging materials industries are very competitive. In the semiconductor equipment industry, significant competitive factors include price, speed/throughput, production yield, process control, delivery time, innovation, quality and customer support. In the semiconductor packaging materials industry, competitive factors include price, delivery and quality.

In each of our markets, we face competition and the threat of competition from established competitors and potential new entrants. In addition, established competitors may combine to form larger, better-capitalized companies. Some of our competitors have or may have significantly greater financial, engineering, manufacturing and marketing resources. Some of these competitors are Asian and European companies that have had, and may continue to have, an advantage over us in supplying products to local customers who appear to prefer to purchase from local suppliers.

We expect our competitors to improve their current products' performance, and to introduce new products and materials with improved price and performance characteristics. Our competitors may independently develop technology similar to or better than ours. New product and material introductions by existing competitors or by new market entrants could hurt our sales. If a semiconductor manufacturer or subcontract assembler selects a competitor's product or materials for a particular assembly operation, we may not be able to sell products or materials to that manufacturer or assembler for a significant period of time. Manufacturers and assemblers sometimes develop lasting relationships with suppliers and assembly equipment providers in our industry and often go years without requiring replacement. In addition, we may have to lower our prices in response to price cuts by our competitors, which may materially and adversely affect our business, financial condition and operating results. If we cannot compete successfully, we could be forced to reduce prices and could lose customers and experience reduced margins and profitability.

***Our success depends in part on our intellectual property, which we may be unable to protect.***

Our success depends in part on our proprietary technology. To protect this technology, we rely principally on contractual restrictions (such as nondisclosure and confidentiality provisions) in our agreements with employees, subcontractors, vendors, consultants and customers and on the common law of trade secrets and proprietary “know-how.” We also rely, in some cases, on patent and copyright protection, although this protection may in some cases be insufficient due to the rapid development of technology in our industry. We may not be successful in protecting our technology for a number of reasons, including the following:

- employees, subcontractors, vendors, consultants and customers may violate their contractual agreements, and the cost of enforcing those agreements may be prohibitive, or those agreements may be unenforceable or more limited than we anticipate;
- foreign intellectual property laws may not adequately protect our intellectual property rights; and
- our patent and copyright claims may not be sufficiently broad to effectively protect our technology; our patents or copyrights may be challenged, invalidated or circumvented; or we may otherwise be unable to obtain adequate protection for our technology.

In addition, our partners and alliances may have rights to technology developed by us. We may incur significant expense to protect or enforce our intellectual property rights. If we are unable to protect our intellectual property rights, our competitive position may be weakened.

***Third parties may claim we are infringing on their intellectual property, which could cause us to incur significant litigation costs or other expenses, or prevent us from selling some of our products.***

The semiconductor industry is characterized by rapid technological change, with frequent introductions of new products and technologies. Industry participants often develop products and features similar to those introduced by others, creating a risk that their products and processes may give rise to claims they infringe on the intellectual property of others. We may unknowingly infringe on the intellectual property rights of others and incur significant liability for that infringement. If we are found to have infringed on the intellectual property rights of others, we could be enjoined from continuing to manufacture, market or use the affected product, or be required to obtain a license to continue manufacturing or using the affected product. A license could be very expensive to obtain or may not be available at all. Similarly, changing or re-engineering our products or processes to avoid infringing the rights of others may be costly, impractical or time consuming.

Occasionally, third parties assert that we are, or may be, infringing on or misappropriating their intellectual property rights. In these cases, we defend, and will continue to defend, against claims or negotiate licenses where we consider these actions appropriate. Intellectual property cases are uncertain and involve complex legal and factual questions. If we become involved in this type of litigation, it could consume significant resources and divert our attention from our business.

***We may be materially and adversely affected by environmental and safety laws and regulations.***

We are subject to various federal, state, local and foreign laws and regulations governing, among other things, the generation, storage, use, emission, discharge, transportation and disposal of hazardous material, investigation and remediation of contaminated sites and the health and safety of our employees. Increasingly, public attention has focused on the environmental impact of manufacturing operations and the risk to neighbors of chemical releases from such operations.

Proper waste disposal plays an important role in the operation of our manufacturing plants. In many of our facilities we maintain wastewater treatment systems that remove metals and other contaminants from process wastewater. These facilities operate under permits that must be renewed periodically. A violation of those permits may lead to revocation of the permits, fines, penalties or the incurrence of capital or other costs to comply with the permits, including potential shutdown of operations.

Compliance with existing or future land use, environmental and health and safety laws and regulations may: (1) result in significant costs to us for additional capital equipment or other process requirements, (2) restrict our ability to expand our operations and/or (3) cause us to curtail our operations. We also could incur significant costs, including cleanup costs, fines or other sanctions and third-party claims for property damage or personal injury, as a result of violations of or liabilities under such laws and regulations. Any costs or liabilities to comply with or imposed under these laws and regulations could materially and adversely affect our business, financial condition and operating results.



***We have the ability to issue additional equity securities, which would lead to dilution of our issued and outstanding common shares.***

The issuance of additional equity securities or securities convertible into equity securities will result in dilution of our existing shareholders' equity interests in us. Our board of directors has the authority to issue, without vote or action of shareholders, preferred shares in one or more series, and has the ability to fix the rights, preferences, privileges and restrictions of any such series. Any such series of preferred shares could contain dividend rights, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences or other rights superior to the rights of holders of our common shares. In addition, we are authorized to issue, without shareholder approval, up to an aggregate of 200 million common shares, of which approximately 63.2 million shares were outstanding as of September 28, 2019. We are also authorized to issue, without shareholder approval (except as required by the rules of the Nasdaq stock market), securities convertible into either common shares or preferred shares.

***Weaknesses in our internal controls and procedures could result in material misstatements in our financial statements.***

Pursuant to the Sarbanes-Oxley Act, management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal controls over financial reporting are processes designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. generally accepted accounting principles. A material weakness is a control deficiency, or combination of control deficiencies, that results in a more than remote likelihood that a material misstatement of annual or interim financial statements will not be prevented or detected.

Our internal controls may not prevent all potential errors or fraud. Any control system, no matter how well designed and implemented, can only provide reasonable and not absolute assurance that the objectives of the control system will be achieved. We or our independent registered public accountants may identify material weaknesses in our internal controls which could adversely affect our ability to ensure proper financial reporting and could affect investor confidence in us and the price of our common shares. We previously disclosed in our Form 10-K/A for the fiscal year ended September 30, 2017, and in our Forms 10-Q and 10 Q/A (as applicable) for each interim period in fiscal 2018, material weaknesses in our internal control over financial reporting in respect of (i) recording and review of manual journal entries related to our warranty accrual and accounts payable and (ii) cash disbursements. Management implemented a number of remediation actions, and has concluded that the material weaknesses described above were remediated as of September 29, 2018.

***Management investigations and restatement of financial statements may require significant management time and attention, result in significant legal expenses or damages and cause our business, financial condition, results of operations and cash flows to suffer.***

In connection with an internal investigation related to an unauthorized transaction by a senior finance employee of the Company, which was discovered following our second fiscal quarter of 2018 and which, as discussed in the Form 10-K/A filed on May 31, 2018, has led to the restatement of our financial statements, we have incurred significant accounting and legal fees, as well as the diversion of management's time and attention. We are subject to legal action relating to these matters and may also become subject to regulatory investigations, stockholder demands or other legal actions, which would, regardless of the outcome, consume substantial resources (including management's time and attention) and result in additional legal, accounting, insurance and other costs. The restatement and related matters could also impair our reputation and our ability to comply with certain continued listing standards of NASDAQ. Each of these occurrences, individually or in the aggregate, could have a material adverse effect on our business, results of operations, financial condition, liquidity and stock price.

***We may be subject to disruptions or failures in our information technology systems and network infrastructures that could have a material adverse effect on us.***

We maintain and rely extensively on information technology systems and network infrastructures for the effective operation of our business. We also hold large amounts of data in data center facilities around the world, primarily in Singapore and the U.S., upon which our business depends. A disruption, infiltration or failure of our information technology systems or any of our data centers as a result of software or hardware malfunctions, computer viruses, cyber-attacks, employee theft or misuse, power disruptions, natural disasters or accidents could cause breaches of data security and loss of critical data, which in turn could materially adversely affect our business. Our security procedures, such as virus protection software and our business continuity planning, such as our disaster recovery policies and back-up systems, may not be adequate or implemented properly to fully address the adverse effect of such events, which could adversely impact our operations. In addition, our business could be adversely affected to the extent we do not make the appropriate level of investment in our technology systems as our technology systems become out-of-date or obsolete and are not able to deliver the type of data integrity and reporting we need to run our business. Furthermore, when we implement new systems and/or upgrade existing systems, we could be faced with temporary or prolonged disruptions that could adversely affect our business.

We have experienced, and expect to continue to be subject to, cybersecurity threats and incidents, ranging from employee error or misuse, to individual attempts to gain unauthorized access to information systems, to sophisticated and targeted measures known as advanced persistent threats, none of which have been material to the Company to date. We devote significant resources to network security and other measures to protect our systems and data from unauthorized access or misuse. However, depending on the nature and scope, cybersecurity incidents could result in business disruption; the misappropriation, corruption or loss of confidential information and critical data (of the Company or that of third parties); reputational damage; litigation with third parties; diminution in the value of our investment in research, development and engineering; data privacy issues; and increased cybersecurity protection and remediation costs.

***Changes to our existing tax incentive in Singapore may materially reduce our reported results of operations in future periods.***

We have obtained a tax incentive which provides that certain classes of income are subject to reduced income tax rates in Singapore. In order to retain this tax benefit, we must meet certain employment and investment conditions. If we cannot, or elect not to, comply with these conditions, we could be required to refund material tax benefits previously realized with respect to this tax incentive. We are currently in discussions on the renewal of our tax incentive, which is presently scheduled to expire in our fiscal 2020. Renewals are at the discretion of the Singapore government and we may not be able to extend the tax incentive arrangement beyond its current expiration date. We may also elect not to renew this tax incentive arrangement. In the absence of the tax incentive, the income tax rate in Singapore that would otherwise apply is 17%, which would result in a significant increase in our provision for income taxes in future periods.

***The phase-out of the London Interbank Offered Rate (“LIBOR”) could affect interest rates under our existing overdraft credit facility agreement.***

LIBOR is the basic rate of interest used in lending between banks on the London interbank market. We use LIBOR as a reference rate to calculate interest rates under our overdraft line of credit facility (“Overdraft Facility”). In 2017, the United Kingdom’s Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. It is unclear if LIBOR will cease to exist at that time or if new methods of calculating LIBOR will be established such that it continues to exist after 2021. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, is considering replacing U.S. dollar LIBOR with a new index, the Secured Overnight Financing Rate (“SOFR”), calculated using short-term repurchase agreements backed by Treasury securities. Whether or not SOFR, or another alternative reference rate, attains market traction as a LIBOR replacement tool remains in question. If LIBOR ceases to exist, we will need to agree upon a replacement index with the bank under our Overdraft Facility, and the interest rate under our Overdraft Facility may change. The new rate may not be as favorable to us as those in effect prior to any LIBOR phase-out. In addition, the transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that currently rely on LIBOR. Any such effects of the transition away from LIBOR, as well as other unforeseen effects, may result in expenses, difficulties, complications or delays in connection with future financing efforts, which could have an adverse impact on our business, financial condition and results of operations.

**Other Risks**

***Our ability to recognize tax benefits on our existing U.S. tax attributes may be limited.***

As of September 28, 2019, we have generated state net operating loss carryforwards of \$146.5 million and U.S. federal and state tax credits of \$7.8 million (“U.S. tax attributes”) that can be used to reduce our future U.S. federal and state income tax obligations. However, under the Tax Reform Act of 1986, the potential future utilization of our U.S. tax attributes may be limited following an ownership change, which is generally defined as a greater than 50% increase in equity ownership by 5% shareholders in any three-year period under Section 382 of the Internal Revenue Code. Should an ownership change be deemed to occur under Section 382, the resulting limitation in our ability to fully utilize our U.S. tax attributes could materially and adversely affect our financial condition and operating results.

***Changes in tax legislation could adversely impact our future profitability.***

We are subject to income taxes in the U.S. and many foreign jurisdictions. Tax laws and regulations are continuously evolving with corporate tax reform and base-erosion efforts continuing to be high priorities in many tax jurisdictions in which we operate. Significant changes in tax legislation, or in the interpretation of existing legislation, could materially and adversely affect our financial condition and operating results. For example, on December 22, 2017, the Tax Cuts and Jobs Act (the “TCJA”) was signed into law, resulting in a material increase to our provision for income taxes in fiscal 2018 and 2019 due to the U.S. one-time transition tax and the need to revalue our U.S. deferred tax assets and liabilities based on the newly enacted U.S. federal statutory tax rate, while other TCJA provisions could impact our future effective tax rate depending on the amount of and geographic mix of our foreign earnings in future periods. Further changes in the tax laws of the U.S. and foreign jurisdictions could also arise as a result of

the base erosion and profit shifting (“BEPS”) project undertaken by the Organisation for Economic Co-operation and Development. Although the timing and methods of implementation may vary, many countries, including those in the Asia/Pacific region in which we have significant operations, have implemented, or are in the process of implementing, legislation or practices inspired by BEPS. The increased scrutiny on international tax and continuous changes to countries’ tax legislation may also affect the policies and decisions of tax authorities with respect to certain income tax positions taken by the Company in prior or future periods. We continue to monitor new tax legislation or other developments that could increase our effective tax rate and impact our future profitability.

***Other changes in taxation which could materially impact our future effective tax rate.***

Our future effective tax rate could be affected by numerous factors including higher or lower than anticipated foreign earnings in various jurisdictions where we are subjected to tax rates that differ from the U.S. federal statutory tax rate, by failure to meet the conditions of or to renew our tax incentive arrangement, by changes in the valuation allowances recorded against certain deferred tax balances, or by changes in tax laws, regulations, accounting principles, or interpretations thereof. Changes in our assertion for foreign earnings permanently or non-permanently reinvested as a result of changes in facts and circumstances and challenges by tax authorities to our historic or future tax positions could also significantly adversely impact our future effective tax rate.

***Anti-takeover provisions in our articles of incorporation and bylaws and under Pennsylvania law may discourage other companies from attempting to acquire us.***

Some provisions of our articles of incorporation and bylaws as well as Pennsylvania law may discourage some transactions where we would otherwise experience a fundamental change. For example, our articles of incorporation and bylaws contain provisions that:

- classify our board of directors into four classes, with one class being elected each year;
- permit our board to issue “blank check” preferred shares without shareholder approval; and
- prohibit us from engaging in some types of business combinations with a holder of 20% or more of our voting securities without super-majority board or shareholder approval.

Further, under the Pennsylvania Business Corporation Law, because our shareholders approved bylaw provisions that provide for a classified board of directors, shareholders may remove directors only for cause. These provisions and some other provisions of the Pennsylvania Business Corporation Law could delay, defer or prevent us from experiencing a fundamental change and may adversely affect our common shareholders' voting and other rights.

***Terrorist attacks, or other acts of violence or war, may affect the markets in which we operate and our profitability.***

Terrorist attacks may negatively affect our operations. There can be no assurance that there will not be further terrorist attacks against the U.S. or U.S. businesses. Terrorist attacks or armed conflicts may directly impact our physical facilities or those of our suppliers or customers. Our primary facilities include administrative, manufacturing, sales and research and development facilities in Singapore, manufacturing and research and development facilities in the Netherlands, China, and Israel and sales and research and development facilities in the U.S. Additional terrorist attacks may disrupt the global insurance and reinsurance industries with the result that we may not be able to obtain insurance at historical terms and levels for all of our facilities. Furthermore, additional attacks may make travel and the transportation of our supplies and products more difficult and more expensive and ultimately affect the sales of our products in the U.S. and overseas. Additional attacks or any broader conflict could negatively impact our domestic and international sales, our supply chain, our production capability and our ability to deliver products to our customers. Political and economic instability in some regions of the world could negatively impact our business. The consequences of terrorist attacks or armed conflicts are unpredictable, and we may not be able to foresee events that could have an adverse effect on our business.

**Item 1B. UNRESOLVED STAFF COMMENTS**

None.

## Item 2. PROPERTIES

The following table reflects our major facilities as of September 28, 2019:

Facility (1)	Approximate Size	Function	Business Segment and Products Manufactured	Lease Expiration Date
Singapore	209,000 sq. ft.	Corporate headquarters, manufacturing, technology, sales and service center	Capital Equipment: ball and wedge bonders, advanced packaging and AT Premier	November 2043 (2)
Suzhou, China	191,000 sq. ft.	Manufacturing, technology and shared support services center	APS: capillaries, dicing blades and bonding wedges	Owned
Eindhoven, Netherlands	110,000 sq. ft.	Manufacturing, technology, sales and service center	Capital Equipment: Advanced Packaging and Electronics Assembly	September 2025 (3)
Fort Washington, Pennsylvania	88,000 sq. ft.	Technology, sales and service center	Not applicable	Owned
Santa Ana, California	65,000 sq. ft.	Technology, sales and service center	Not applicable	August 2036 (4)
Haifa, Israel	31,000 sq. ft.	Manufacturing and technology center	APS: capillary blanks (semi-finish)	October 2037 (5)

- (1) Each of the facilities listed in this table is leased other than the facility in Suzhou, China and Fort Washington, Pennsylvania
- (2) Includes lease extension periods at the Company's option. Initial lease expires in November 2023.
- (3) Includes lease extension periods at the Company's option. Initial lease expires in September 2020.
- (4) Includes lease extension periods at the Company's option. Initial lease expires in September 2026.
- (5) Includes lease extension periods at the Company's option. Initial lease expires in October 2027.

In addition, the Company rents space for sales support, customer support, services and administrative functions in China, Germany, Japan, Malaysia, South Korea, Switzerland, Taiwan, Thailand and the Philippines. The Company believes the facilities are generally in good condition and suitable to the extent of utilization needed.

## Item 3. LEGAL PROCEEDINGS

From time to time, we may be a plaintiff or defendant in cases arising out of our business. We cannot be assured of the results of any pending or future litigation, but we do not believe resolution of these matters will materially or adversely affect our business, financial condition or operating results.

## Item 4. MINE SAFETY DISCLOSURES

Not applicable.

## PART II

### Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on The Nasdaq Global Market ("Nasdaq") under the symbol "KLIC." On November 8, 2019, there were approximately 200 holders of record of the shares of outstanding common stock.

On August 7, 2019, May 20, 2019, February 28, 2019 and December 12, 2018, the Board of Directors declared a quarterly dividend \$0.12 per share of common stock. During the fiscal year ended September 28, 2019, the Company declared dividends of \$0.48 per share of common stock. 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 stockholders.

For the purpose of calculating the aggregate market value of shares of our common stock held by non-affiliates, as shown on the cover page of this report, we have assumed all of our outstanding shares were held by non-affiliates except for shares held by our directors and executive officers. However, this does not necessarily mean that all directors and executive officers of the Company are, in fact, affiliates of the Company, or there are no other persons who may be deemed to be affiliates of the Company. Further information concerning the beneficial ownership of our executive officers, directors and principal shareholders will be included in our Proxy Statement for the 2020 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission on or about January 4, 2020.

#### Recent Sales of Unregistered Securities and Use of Proceeds

None.

#### Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes the repurchases of common stock during the three months ended September 28, 2019 (in thousands, except per share amounts):

Period	Total Number of Shares Purchased	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 <sup>(1)</sup>
June 30, 2019 to July 27, 2019	443	\$ 22.21	443	\$ 102,273
July 28, 2019 to August 31, 2019	109	\$ 20.74	109	\$ 100,004
September 1, 2019 to September 28, 2019	128	\$ 22.37	128	\$ 97,145
For the three months ended September 28, 2019	680		680	

- (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 under the Program to \$300 million. The Company may purchase 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.

### Item 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following tables reflect selected historical consolidated financial data derived from the consolidated financial statements of Kulicke and Soffa Industries, Inc. and subsidiaries as of and for each of the fiscal years ended 2019, 2018, 2017, 2016, and 2015. As previously reported on the Annual Report on Form 10-K/A for the fiscal year ended September 30, 2017, the Company restated certain of its financial statements and related notes for the fiscal years ended September 30, 2017, October 1, 2016 and October 3, 2015. This annual report for the fiscal year ended September 28, 2019 reflects the restated numbers for those periods.

This data should be read in conjunction with our consolidated financial statements, including notes and other financial information included elsewhere in this report in respect of the fiscal years identified in the column headings of the tables below.

<i>(in thousands)</i>	Fiscal				
	2019	2018	2017	2016	2015
<b>Statement of Operations Data:</b>					
Net revenue	\$ 540,052	\$ 889,121	\$ 809,041	\$ 627,192	\$ 536,471
Income from operations	21,610	166,632	113,083	53,953	38,591
Interest income, net	13,077	10,917	5,432	2,211	454
Income before income taxes	34,687	177,549	118,515	56,164	39,045
Provision for (benefit from) income taxes <sup>(1)</sup>	22,910	120,744	(7,394)	7,709	(12,867)
Share of results of equity-method investee, net of tax	124	129	(190)	—	—
Net income	\$ 11,653	\$ 56,676	\$ 126,099	\$ 48,455	\$ 51,912

	Fiscal				
	2019	2018	2017	2016	2015
<b>Per Share Data:</b>					
Net income per share:					
Basic	\$ 0.18	\$ 0.82	\$ 1.78	\$ 0.69	\$ 0.69
Diluted	\$ 0.18	\$ 0.80	\$ 1.75	\$ 0.68	\$ 0.69
Cash dividends declared per share	\$ 0.48	\$ 0.24	\$ —	\$ —	\$ —

Weighted average shares outstanding:					
Basic	65,286	69,380	70,906	70,477	75,414
Diluted	65,948	70,419	72,063	70,841	75,659

<i>(in thousands)</i>	Fiscal				
	2019	2018	2017	2016	2015
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments	\$ 593,184	\$ 614,148	\$ 608,410	\$ 547,907	\$ 498,614
Working capital	719,109	813,197	760,401	654,983	624,659
Total assets	1,079,616	1,185,740	1,171,107	982,444	904,466
Long-term and current portion of financing obligation	15,032	15,957	16,769	17,318	17,003
Shareholders' equity	769,063	880,207	920,030	799,524	760,912

(1) The following are the most significant factors that affected our provision for (benefit from) income taxes: volatility in our earnings each fiscal year; variation in our earnings among the various tax jurisdictions in which we operate; changes in assumptions regarding repatriation of foreign earnings; changes in tax legislation; remeasurement of deferred taxes; and unrecognized tax benefit.

## **Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*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):*

- *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, 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 Annual Report on Form 10-K and our other reports and registration statements filed from time to time with the Securities and Exchange Commission.*

*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. Future events and actual results, performance and achievements could differ materially from those set forth in, contemplated by or underlying the forward-looking statements, which speak only as of the date on which they were made. Except as required by law, we assume no obligation to update or revise any forward-looking statement to reflect actual results or changes in, or additions to, the factors affecting such forward-looking statements. Given those risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictions of actual results.*

*This section of this Form 10-K generally discusses 2019 and 2018 items and year-to-year comparisons between 2019 and 2018. Discussions of 2017 items and year-to-year comparisons between 2018 and 2017 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended September 29, 2018.*

Our Management's Discussion and Analysis ("MD&A") is provided in addition to the accompanying consolidated financial statements and notes to assist readers in understanding our results of operations, financial condition, and cash flows. MD&A is organized as follows:

- Overview: Introduction of our operations, key events, business environment, technology leadership, products and services
- Critical Accounting Policies
- Recent Accounting Pronouncements
- Results of Operations
- Liquidity and Capital Resources
- Other Obligations and Contingent Payments

### **Overview**

For an overview of our business, see "Part I – Item 1. – Business"

### **Critical Accounting Policies**

The preparation of consolidated financial statements requires us 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 financial statements. On an ongoing basis, we evaluate 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, income taxes, equity-based compensation expense and warranties. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable. As a result, we make judgments regarding the carrying values of our assets and liabilities that are not readily apparent from other sources. Authoritative pronouncements, historical experience and assumptions are used as the basis for making estimates, and on an ongoing basis, we evaluate these estimates. Actual results may differ from these estimates.

We believe the following critical accounting policies, which have been reviewed with the Audit Committee of our Board of Directors, reflect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

### ***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 our 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.

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 any of 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.

### ***Allowance for Doubtful Accounts***

We maintain allowances for doubtful accounts for estimated losses resulting from our customers' failure to make required payments. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. We are subject to concentrations of customers and sales to a few geographic locations, which could also impact the collectability of certain receivables. If global or regional economic conditions deteriorate or political conditions were to change in some of the countries where we do business, it could have a significant impact on our results of operations, and our ability to realize the full value of our accounts receivable.



## ***Inventories***

Inventories are stated at the lower of cost (on a first-in, first-out basis) or net realizable value. We generally provide 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. We communicate forecasts of our future consumption to our suppliers and adjust commitments to those suppliers accordingly. If required, we reserve the difference between the carrying value of our 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.

## ***Accounting for Impairment of Goodwill***

ASC No. 350, *Intangibles-Goodwill and Other* ("ASC 350"), requires goodwill and 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 two-step impairment test is unnecessary. However, if a company concludes otherwise, then it is required to perform the first step of the two-step goodwill impairment test. If the carrying value of a reporting unit exceeds its fair value in the first step of the test, then a company is required to perform the second step of the goodwill impairment test to measure the amount of the reporting unit's goodwill impairment loss, if any.

As part of the annual evaluation, the Company performs an impairment assessment 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 intangible assets, see Note 3 to our consolidated financial statements in Item 8.

## ***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 to be realized, on a more likely than not basis. 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 the deferred tax asset would increase income in the period such determination is made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would decrease income in the period such determination is made.

The Company determines the amount of the 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 determination of whether 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 process, 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 9 for a summary of the terms of these performance-based awards. The fair value of the Company's stock option awards are 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.

### RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 to our consolidated financial statements in Item 8 for a description of certain recent accounting pronouncements including the expected dates of adoption and effects on our consolidated results of operations and financial condition.

### RESULTS OF OPERATIONS

#### Results of Operations for fiscal 2019 and 2018

The following table reflects our income from operations for fiscal 2019 and 2018:

<i>(dollar amounts in thousands)</i>	Fiscal		\$ Change	% Change
	2019	2018		
Net revenue	\$ 540,052	\$ 889,121	\$ (349,069)	(39.3)%
Cost of sales	285,462	479,680	(194,218)	(40.5)%
Gross profit	254,590	409,441	(154,851)	(37.8)%
Selling, general and administrative	116,811	123,188	(6,377)	(5.2)%
Research and development	116,169	119,621	(3,452)	(2.9)%
Operating expenses	232,980	242,809	(9,829)	(4.0)%
Income from operations	\$ 21,610	\$ 166,632	\$ (145,022)	(87.0)%

#### Bookings and Backlog

Our backlog consists of customer orders scheduled for shipment within the next twelve months. A booking is recorded when a customer order is reviewed and it is determined that all specifications can be met, production (or service) can be scheduled, a delivery date can be set, and the customer meets our credit requirements. We use bookings to evaluate the results of our operations, generate future operating plans and assess the performance of our company. While we believe that this measure is useful in evaluating our business, this information should be considered as supplemental in nature and is not meant as a substitute for revenue recognized in accordance with GAAP. In addition, other companies, including companies in our industry, may calculate bookings differently or not at all, which reduces its usefulness as a comparative measure. Reconciliation of bookings to net revenue is not practicable. A majority of our orders are subject to cancellation or deferral by our customers with limited or no penalties. Also, customer demand for our products can vary dramatically without prior notice. Because of the volatility of customer demand, possibility of customer changes in delivery schedules or cancellations and potential delays in product shipments, our backlog as of any particular date may not be indicative of net revenue for any succeeding period.

The following tables reflect our bookings and backlog for fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal	
	2019	2018
Bookings	\$ 503,098	\$ 840,083

<i>(in thousands)</i>	As of	
	September 28, 2019	September 29, 2018
Backlog	\$ 104,711	\$ 141,665

Our net revenues for fiscal 2019 decreased as compared to our net revenues for fiscal 2018 primarily due to lower volume as a result of lower demand from our customers, particularly in our Capital Equipment segment.

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. There can be no assurances regarding levels of demand for our products and we believe historical industry-wide volatility will persist.

The U.S. and several other countries have levied tariffs on certain goods. In particular, trade tensions between the U.S. and China have been escalating since 2018, with U.S. tariffs on Chinese goods and retaliatory Chinese tariffs on U.S. goods. These have resulted in uncertainties in the semiconductor, LED, memory and automotive markets. While the Company anticipates long-term growth in semiconductor consumption, the softening in demand, which began in the fourth quarter of fiscal 2018, is expected to continue through fiscal 2020.

### **Net Revenue**

Approximately 93.3% and 92.3% of our net revenue for fiscal 2019 and 2018, respectively, was for shipments to customer locations outside of the U.S., primarily in the Asia/Pacific region. In the Asia/Pacific region, our customer base is also becoming more geographically concentrated as a result of economic and industry conditions. Approximately 46.7% and 46.0% of our net revenue for fiscal 2019 and 2018, respectively, was for shipments to customers located in China.

The following table reflects net revenue by business segment for fiscal 2019 and 2018:

<i>(dollar amounts in thousands)</i>	Fiscal		\$ Change	% Change
	2019	2018		
Capital Equipment	\$ 386,820	\$ 719,390	\$ (332,570)	(46.2)%
APS	153,232	169,731	(16,499)	(9.7)%
Total net revenue	\$ 540,052	\$ 889,121	\$ (349,069)	(39.3)%

### **Capital Equipment**

The following table reflects the components of Capital Equipment net revenue change between fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal 2019 vs. 2018		
	Price	Volume	\$ Change
Capital Equipment	\$ (3,910)	\$ (328,660)	\$ (332,570)

For fiscal 2019, the lower Capital Equipment net revenue as compared to the prior year period was primarily due to lower volume and unfavorable price variance. The lower volume was primarily due to a decrease in customer investments as a result of uncertainties in semiconductor, LED, memory and automotive markets. The unfavorable price variance was primarily due to competition in power module, power discrete, and battery application and unfavorable product mix.

### **APS**

The following table reflects the components of APS net revenue change between fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal 2019 vs. 2018		
	Price	Volume	\$ Change
APS	\$ (7,922)	\$ (8,577)	\$ (16,499)

For fiscal 2019, the lower APS net revenue as compared to fiscal 2018 was due to lower sales volume and unfavorable price variance. The lower sales volume was due to lower utilization of our products and the unfavorable price was due to competition in consumable business and unfavorable product mix.

### **Gross Profit**

The following table reflects gross profit by business segment for fiscal 2019 and 2018:

<i>(dollar amounts in thousands)</i>	Fiscal		\$ Change	% Change
	2019	2018		
Capital Equipment	\$ 168,683	\$ 315,939	\$ (147,256)	(46.6)%
APS	85,907	93,502	(7,595)	(8.1)%
Total gross profit	\$ 254,590	\$ 409,441	\$ (154,851)	(37.8)%

The following table reflects gross profit as a percentage of net revenue by business segment for fiscal 2019 and 2018:

	Fiscal		Basis point change
	2019	2018	
Capital Equipment	43.6%	43.9%	(30)
APS	56.1%	55.1%	100
Total gross margin	47.1%	46.1%	100

### **Capital Equipment**

The following table reflects the components of Capital Equipment gross profit change between fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal 2019 vs. 2018			
	Price	Cost	Volume	\$ Change
Capital Equipment	\$ (3,910)	\$ 4,060	\$ (147,406)	\$ (147,256)

For fiscal 2019, the lower Capital Equipment gross profit as compared to fiscal 2018 was primarily due to lower volume and unfavorable price variance. The lower volume was primarily due to decrease in customer investments as a result of uncertainties in semiconductor, LED, memory and automotive markets. The unfavorable price variance was primarily due to competition in power module, power discrete and battery application and unfavorable product mix. The lower volume and unfavorable price variance were partially offset by the lower cost. The lower cost was primarily due to change in product mix.

### **APS**

The following table reflects the components of APS gross profit change between fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal 2019 vs. 2018			
	Price	Cost	Volume	\$ Change
APS	\$ (7,922)	\$ 1,175	\$ (848)	\$ (7,595)

For fiscal 2019, the lower APS gross profit as compared to fiscal 2018 was primarily due to price decreases as a result of competition in consumable business and unfavorable product mix.

### **Operating Expenses**

The following table reflects operating expenses as a percentage of net revenue for fiscal 2019 and 2018:

	Fiscal		Basis point change
	2019	2018	
Selling, general and administrative	21.6%	13.9%	770
Research and development	21.5%	13.5%	800
Total	43.1%	27.4%	1,570

### ***Selling, General and Administrative (“SG&A”)***

For fiscal 2019, lower SG&A expenses as compared to fiscal 2018 were primarily due to \$10.7 million lower staff costs mainly as a result of decrease in incentive compensation and a \$0.4 million decrease in amortization expenses. This was partially offset by \$3.4 million net unfavorable variance in foreign exchange, \$0.8 million lower net gain in disposal of fixed assets and a \$0.6 million increase in professional fees.

### ***Research and Development (“R&D”)***

For fiscal 2019, lower R&D expenses as compared to fiscal 2018 were primarily due to lower staff costs mainly as a result of decrease in incentive compensation. This was partially offset by higher investment in the development of advanced packaging products.

### ***Income from Operations***

For fiscal 2019, total income from operations was lower by \$145.0 million as compared to fiscal 2018. This was primarily due to decreased revenue in fiscal 2019, partially offset by lower operating expenses.

### ***Interest Income and Expense***

The following table reflects interest income and interest expense for fiscal 2019 and 2018:

<i>(dollar amounts in thousands)</i>	Fiscal		\$ Change	% Change
	2019	2018		
Interest income	\$ 15,132	\$ 11,971	\$ 3,161	26.4%
Interest expense	\$ (2,055)	\$ (1,054)	\$ (1,001)	95.0%

For fiscal 2019, interest income was higher as compared to fiscal 2018. This was primarily due to higher average interest rates.

For fiscal 2019, higher interest expense was due to interest on the Overdraft Facility (Refer to Note 8 of our consolidated financial statements included in Item 8 of this Annual Report), partially offset by a decrease in interest on financing obligations relating to the Building (as defined in Note 8), which were incurred subsequent to the completion of the Building in December 2013.

### ***Provision for Income Taxes***

The following table reflects the provision for income taxes and the effective tax rate for fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal	
	2019	2018
Provision for income taxes	\$ 22,910	\$ 120,744
Effective tax rate	66.0%	68.0%

For fiscal 2019, the effective tax rate differed from the U.S. federal statutory tax rate primarily due to tax expense related to adjustments to the U.S. one-time transition tax pursuant to newly issued TCJA regulations, valuation allowances recorded against certain deferred tax assets, remeasurement of certain deferred tax balances, undistributed foreign earnings, and deemed dividends, partially offset by tax benefit from foreign earnings subject to a lower statutory tax rate than the U.S. federal statutory tax rate, tax incentives, and tax credits generated during the fiscal year. For further information, refer to Note 14: Income Taxes of our consolidated financial statements.

For fiscal 2018, the effective tax rate differed from the U.S. federal statutory tax rate primarily due to tax expense related to the U.S. one-time transition tax and remeasurement of U.S. deferred tax balances pursuant to the enactment of the TCJA, valuation allowances recorded against certain deferred tax assets, undistributed foreign earnings, and deemed dividends, partially offset by tax benefit from foreign earnings subject to a lower statutory tax rate than the U.S. federal statutory tax rate, tax incentives, and tax credits generated during the fiscal year.

During fiscal 2019, the Company completed its evaluation of the future cash needs of its U.S. and foreign operations, the alignment of cash balances with the Company’s long-term capital allocation strategy, and the impact of the TCJA which generally allows U.S. corporations to make distributions without incurring additional U.S. income tax. As a result of this reassessment, a portion of the Company’s undistributed foreign earnings are no longer deemed to be indefinitely reinvested outside the U.S. The Company recorded \$0.7 million of tax expense in the second quarter of fiscal 2019 as part of the initial change in assertion and \$1.8 million of tax expense cumulatively by the end of fiscal 2019 primarily due to subsequent changes in foreign exchange rates.

## LIQUIDITY AND CAPITAL RESOURCES

The following table reflects total cash and investments as of September 28, 2019 and September 29, 2018:

<i>(dollar amounts in thousands)</i>	As of		Change
	September 28, 2019	September 29, 2018	
Cash and cash equivalents	\$ 364,184	\$ 320,630	\$ 43,554
Restricted cash	—	518	(518)
Short-term investments	229,000	293,000	(64,000)
Total cash, cash equivalents, restricted cash and short-term investments	\$ 593,184	\$ 614,148	\$ (20,964)
Percentage of total assets	54.9%	51.8%	

The following table reflects summary Consolidated Statement of Cash Flow information for fiscal 2019 and 2018:

<i>(in thousands)</i>	Fiscal	
	2019	2018
Net cash provided by operating activities	\$ 65,967	\$ 123,499
Net cash provided by/(used in) investing activities	47,468	(96,871)
Net cash used in financing activities	(71,318)	(99,135)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	919	715
Changes in cash, cash equivalents and restricted cash	\$ 43,036	\$ (71,792)
Cash, cash equivalents and restricted cash, beginning of period	321,148	392,940
Cash, cash equivalents and restricted cash, end of period	\$ 364,184	\$ 321,148

### Fiscal 2019

Net cash provided by operating activities was primarily the result of net income of \$11.7 million, non-cash adjustments of \$43.1 million and working capital changes of \$11.2 million. The change in working capital was primarily driven by an decrease in accounts and notes receivable of \$47.4 million and a decrease in inventories of \$24.1 million. This was partially offset primarily by a decrease in accounts payable and accrued expenses and other current liabilities of \$53.8 million and a decrease in income taxes payable of \$7.8 million.

The decrease in accounts receivable was due to lower collections and sales in fiscal 2019. The decrease in inventories was due to decreased manufacturing activities in fiscal 2019 in response to decreased sales in fiscal 2019. The decrease in accounts payable and accrued expenses and other current liabilities was primarily due to lower accruals on incentive compensation and lower purchases due to lower manufacturing activities. The lower income taxes payable was primarily due to lower profit and payment of tax in fiscal 2019.

The increase in net cash provided by investing activities primarily relates to maturity of short-term investments of \$683.0 million, partially offset by purchases of short-term investments of \$619.0 million, capital expenditures of \$11.7 million and an equity investment of \$5.0 million.

Net cash used in financing activities primarily relates to the repurchase of common stock of \$99.9 million, and dividends paid to common stockholders of \$31.6 million, partially offset by an increase in net overdraft of \$60.1 million under our overdraft line of credit.

### Fiscal 2018

Net cash provided by operating activities was primarily the result of net income of \$56.7 million, non-cash adjustments of \$55.9 million and working capital changes of \$10.9 million. The change in working capital was primarily driven by an increase in income tax payable of \$78.0 million and a decrease in prepaid expenses and other current assets of \$9.4 million. This was partially offset primarily by an increase in accounts and notes receivable of \$45.2 million and a decrease in accounts payable and accrued expenses and other current liabilities of \$30.9 million.

The increase in income tax payable was primarily due to additional tax payable for the U.S. one-time transition tax as a result of the enactment of the Tax Cuts and Jobs Act (the "TCJA"). The decrease in prepaid expenses and other current assets was primarily due to tax refunds received. The increase in accounts receivable was due to slower collections. The decrease in accounts payable and

accrued expenses and other current liabilities was primarily due to lower customer obligations such as customer credit and advances, and lower accrued incentive compensation.

Net cash used in investing activities was primarily due to purchases of short-term investments of \$684.0 million and capital expenditures of \$20.5 million, offset by maturity of short-term investments of \$607.0 million.

Net cash used in financing activities primarily relates to the repurchase of common stock of \$90.3 million and dividends paid to common stockholders of \$8.2 million.

### **Fiscal 2020 Liquidity and Capital Resource Outlook**

We expect our fiscal 2020 capital expenditures to be between \$18.0 million and \$22.0 million. 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.

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

As of September 28, 2019 and September 29, 2018, approximately \$591.3 million and \$545.0 million of cash, cash equivalents, restricted cash and short-term investments were held by the Company's foreign subsidiaries, respectively. As a result of the TCJA, signed into law on December 22, 2017, a portion of the cash amounts as of September 28, 2019 are expected to be available for use in the U.S. without incurring additional U.S. income tax. Please refer to Note 13 of Item 8 for more details regarding the impact of the TCJA on our income taxes.

The Company's international operations and capital requirements are 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. In fiscal 2019, the Company's U.S. operations and capital requirements have been funded primarily by cash generated from U.S. operating activities, repatriation of cash generated by foreign operating activities, and by a Facility Agreement 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. tax. We believe these future repatriations of cash and our U.S. sources of cash and liquidity are sufficient to meet our other 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 Agreement with MUFG Bank, Ltd., dividend program, and the share repurchase program as approved by the Board of Directors. Should the Company's U.S. cash needs exceed its funds generated by U.S. and foreign operations due to changing business conditions or transactions outside the ordinary course, such as acquisitions of large capital assets, businesses or any other capital appropriation in the U.S., the Company may require additional financing in the U.S. In this event, the Company could seek U.S. borrowing alternatives.

#### *Share Repurchase Program*

On August 15, 2017, the Company's Board of Directors authorized 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 Company's 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 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 fiscal year ended September 28, 2019, the Company repurchased a total of 4.7 million shares of common stock at a cost of \$100.5 million. As of September 28, 2019, our remaining share repurchase authorization under the Program was approximately \$97.1 million.

## Dividends

On August 7, 2019, May 20, 2019, February 28, 2019 and December 12, 2018, the Board of Directors declared a quarterly dividend \$0.12 per share of common stock. During the fiscal year ended September 28, 2019, the Company declared dividends of \$0.48 per share of common stock. 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 stockholders.

## Other Obligations and Contingent Payments

In accordance with U.S. generally accepted accounting principles, certain obligations and commitments as of September 28, 2019 are appropriately not included in the Consolidated Balance Sheets and Statements of Operations in this Form 10-K. However, because these obligations and commitments are entered into in the normal course of business and because they may have a material impact on our liquidity, we have disclosed them in the table below.

Additionally, as of September 28, 2019, the Company had deferred tax liabilities of \$32.1 million, unrecognized tax benefit within the income tax payable for uncertain tax positions of \$11.7 million and related accrued interest of \$1.4 million. These amounts are not included in the contractual obligation 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 September 28, 2019:

<i>(in thousands)</i>	Total	Payments due in			
		Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Inventory purchase obligations <sup>(1)</sup>	\$ 83,278	83,278	\$ —	\$ —	\$ —
Operating lease obligations <sup>(2)</sup>	16,273	4,089	4,758	3,789	3,637
U.S. One-time transition tax payable <sup>(3)</sup> (reflected on our Balance Sheets)	72,401	5,175	12,213	18,607	36,406
Asset retirement obligations (reflected on our Balance Sheets) <sup>(4)</sup>	1,636	125	323	1,063	125
Total	<u>\$ 173,588</u>	<u>\$ 92,667</u>	<u>\$ 17,294</u>	<u>\$ 23,459</u>	<u>\$ 40,168</u>

- (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) Represents minimum rental commitments under various leases (excluding taxes, insurance, maintenance and repairs, which are also paid by us) primarily for various facility and equipment leases, which expire periodically through 2027 (not including lease extension options, if applicable).

The annual rent and service charge for our corporate headquarters ranges from \$4 million to \$5 million Singapore dollars and is not included in the table above.

In accordance with ASC No. 840, *Leases* ("ASC 840"), the Company was considered to be the owner of its headquarters 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, the building remained on the Consolidated Balance Sheet, and the corresponding financing obligation was reclassified to long-term liability. As of September 28, 2019, we recorded a financing obligation of \$15.0 million. The financing obligation is not reflected in the table above.

- (3) Associated with the U.S. one-time transition tax on certain earnings and profits of our foreign subsidiaries in relation to the TCJA.
- (4) 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 September 28, 2019 and September 29, 2018, the outstanding amount was \$3.1 million and \$4.0 million respectively.

### ***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 or any breach of a representation or warranty under the Facility Agreements. As of September 28, 2019, the outstanding amount under the Facility Agreements was \$60.9 million.

As of September 28, 2019, we did not have any other off-balance sheet arrangements, such as contingent interests or obligations associated with variable interest entities.

## **Item 7A. 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 to 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 September 28, 2019, 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 foreign exchange forward contracts have maturities of up to twelve months. We have foreign exchange forward contracts with notional amounts of \$33.8 million outstanding as of September 28, 2019. On October 24, 2019, the Company entered into foreign exchange forward contracts with notional amounts of \$10.0 million.

## **Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The consolidated financial statements of Kulicke and Soffa Industries, Inc. listed in the index appearing under Item 15(a)(1) herein are filed as part of this Report under this Item 8.

### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Kulicke and Soffa Industries, Inc.

#### ***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Kulicke and Soffa Industries, Inc. and its subsidiaries (the “Company”) as of September 28, 2019 and September 29, 2018, and the related consolidated statements of operations, comprehensive income, changes in shareholders’ equity and cash flows for each of the three years in the period ended September 28, 2019, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended September 28, 2019 appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of September 28, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 28, 2019 and September 29, 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 28, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 28, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

#### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

#### ***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding

prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### ***Critical Audit Matters***

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

#### *Income Taxes- Application of newly issued regulations and guidance on the computation of the U.S. one-time transition tax resulting from the US Tax Cuts and Jobs Act of 2017*

As described in Note 13 to the consolidated financial statements, the Tax Cuts and Jobs Act (the "TCJA"), signed into law on December 22, 2017, made certain changes to the US Tax code and included a one-time transition tax on deemed repatriation of previously untaxed accumulated earnings and profits of certain foreign subsidiaries. The consolidated financial statements for the fiscal year ended September 29, 2018 reflect the income tax effects of the TCJA as required by Accounting Standards Codification Topic 740. In fiscal year 2019, the Company recorded an additional tax expense of \$9.4 million due to newly issued TCJA regulations and guidance on the computation of the U.S. one-time transition tax.

The principal considerations for our determination that performing procedures relating to the application of newly issued regulations and guidance on the computation of the U.S. one-time transition tax resulting from the TCJA is a critical audit matter are (i) the significant judgments made by management when applying the newly issued regulations and guidance to the deemed repatriated previously untaxed accumulated earnings and profits of certain foreign subsidiaries; (ii) the high degree of auditor judgment and subjectivity in applying procedures to evaluate management's application of these newly issued regulations and guidance to the deemed repatriated previously untaxed accumulated earnings and profits of certain foreign subsidiaries; and (iii) the nature of our effort included the use of professionals with specialized skill and knowledge to assist in evaluating the application of the newly issued regulations and guidance.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to income taxes, including control procedures over management's methods and assumptions used in identifying, applying, and disclosing the impacts to the Company's tax positions recorded as a result of newly issued TCJA regulations and guidance on the computation of the U.S. one-time transition tax. These procedures also included, among others, evaluating the appropriateness of management's judgments when applying the newly issued regulations and guidance, evaluating management's documentation regarding the newly issued regulations and guidance, assessing the impact of the newly issued regulations and guidance on the financial position of the Company, and testing the underlying data used in management's assessment of the application of the newly issued regulations and guidance. When assessing the proper application of the newly issued regulations and guidance on the computation of the U.S. one-time transition tax resulting from the TCJA, we involved the use of professionals with specialized skill and knowledge.

/s/ PricewaterhouseCoopers LLP  
Singapore  
November 15, 2019

We have served as the Company's auditor since 2011.

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

	As of	
	September 28, 2019	September 29, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 364,184	\$ 320,630
Restricted cash	—	518
Short-term investments	229,000	293,000
Accounts and notes receivable, net of allowance for doubtful accounts of \$597 and \$385, respectively	195,830	243,373
Inventories, net	89,308	115,191
Prepaid expenses and other current assets	15,429	14,561
<b>Total current assets</b>	<b>893,751</b>	<b>987,273</b>
Property, plant and equipment, net	72,370	76,067
Goodwill	55,691	56,550
Intangible assets, net	42,651	52,871
Deferred tax assets	6,409	9,017
Equity investments	6,250	1,373
Other assets	2,494	2,589
<b>TOTAL ASSETS</b>	<b>\$ 1,079,616</b>	<b>\$ 1,185,740</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Short term debt	\$ 60,904	\$ —
Accounts payable	36,711	48,527
Accrued expenses and other current liabilities	64,533	105,978
Income taxes payable	12,494	19,571
<b>Total current liabilities</b>	<b>174,642</b>	<b>174,076</b>
Financing obligation	14,207	15,187
Deferred tax liabilities	32,054	25,591
Income taxes payable	80,290	81,491
Other liabilities	9,360	9,188
<b>TOTAL LIABILITIES</b>	<b>\$ 310,553</b>	<b>\$ 305,533</b>
Commitments and contingent liabilities (Note 15)		
<b>SHAREHOLDERS' EQUITY:</b>		
Preferred stock, without par value:		
Authorized 5,000 shares; issued - none	\$ —	\$ —
Common stock, no par value:		
Authorized 200,000 shares; issued 85,364 and 84,659 respectively; outstanding 63,172 and 67,143 shares, respectively	533,590	519,244
Treasury stock, at cost, 22,192 and 17,516 shares, respectively	(349,212)	(248,664)
Retained earnings	594,625	613,529
Accumulated other comprehensive loss	(9,940)	(3,902)
<b>TOTAL SHAREHOLDERS' EQUITY</b>	<b>\$ 769,063</b>	<b>\$ 880,207</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>\$ 1,079,616</b>	<b>\$ 1,185,740</b>

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

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

	Fiscal		
	2019	2018	2017
Net revenue	\$ 540,052	\$ 889,121	\$ 809,041
Cost of sales	285,462	479,680	426,947
Gross profit	<u>254,590</u>	<u>409,441</u>	<u>382,094</u>
Selling, general and administrative	116,811	123,188	133,601
Research and development	116,169	119,621	100,203
Impairment charges	—	—	35,207
Operating expenses	<u>232,980</u>	<u>242,809</u>	<u>269,011</u>
Income from operations	21,610	166,632	113,083
Interest income	15,132	11,971	6,491
Interest expense	(2,055)	(1,054)	(1,059)
Income before income taxes	<u>34,687</u>	<u>177,549</u>	<u>118,515</u>
Provision for (benefit from) income tax	22,910	120,744	(7,394)
Share of results of equity-method investee, net of tax	124	129	(190)
Net income	<u>\$ 11,653</u>	<u>\$ 56,676</u>	<u>\$ 126,099</u>
Net income per share:			
Basic	\$ 0.18	\$ 0.82	\$ 1.78
Diluted	\$ 0.18	\$ 0.80	\$ 1.75
Cash dividends declared per share	\$ 0.48	\$ 0.24	\$ —
Weighted average shares outstanding:			
Basic	65,286	69,380	70,906
Diluted	65,948	70,419	72,063

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

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

	Fiscal		
	2019	2018	2017
Net income	\$ 11,653	\$ 56,676	\$ 126,099
Other comprehensive (loss) / income:			
Foreign currency translation adjustment	(6,534)	(3,633)	1,960
Unrecognized actuarial gain on pension plan, net of tax	22	116	990
	<u>(6,512)</u>	<u>(3,517)</u>	<u>2,950</u>
Derivatives designated as hedging instruments:			
Unrealized (loss) / gain on derivative instruments, net of tax	(741)	(669)	669
Reclassification adjustment for loss / (gain) on derivative instruments recognized, net of tax	1,215	(1,755)	1,146
Net increase / (decrease) from derivatives designated as hedging instruments, net of tax	474	(2,424)	1,815
Total other comprehensive (loss) / income	<u>(6,038)</u>	<u>(5,941)</u>	<u>4,765</u>
Comprehensive income	<u>\$ 5,615</u>	<u>\$ 50,735</u>	<u>\$ 130,864</u>

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

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

	Common Stock		Treasury Stock	Retained earnings	Accumulated Other Comprehensive (loss) / income	Shareholders' Equity
	Shares	Amount				
	70,420	\$ 498,676	\$ (139,407)	\$ 442,981	\$ (2,726)	\$ 799,524
Issuance of stock for services rendered	45	750	—	—	—	750
Repurchase of common stock	(945)	—	(18,197)	—	—	(18,197)
Exercise of stock options	61	509	—	—	—	509
Issuance of shares for equity-based compensation	616	—	—	—	—	—
Excess tax benefits from equity based compensation	—	(4,392)	—	—	—	(4,392)
Equity-based compensation	—	10,972	—	—	—	10,972
Components of comprehensive income:						
Net income	—	—	—	126,099	—	126,099
Other comprehensive income	—	—	—	—	4,765	4,765
Total comprehensive income	—	—	—	126,099	4,765	130,864
Balances as of September 30, 2017	70,197	\$ 506,515	\$ (157,604)	\$ 569,080	\$ 2,039	\$ 920,030
Issuance of stock for services rendered	33	780	—	—	—	780
Repurchase of common stock	(3,760)	—	(91,060)	—	—	(91,060)
Exercise of stock options	6	55	—	—	—	55
Issuance of shares for equity-based compensation	667	—	—	—	—	—
Equity-based compensation	—	10,480	—	—	—	10,480
Cumulative effect of accounting changes	—	1,414	—	4,006	—	5,420
Cash dividends declared	—	—	—	(16,233)	—	(16,233)
Components of comprehensive income:						
Net income	—	—	—	56,676	—	56,676
Other comprehensive loss	—	—	—	—	(5,941)	(5,941)
Total comprehensive income/ (loss)	—	—	—	56,676	(5,941)	50,735
Balances as of September 29, 2018	67,143	\$ 519,244	\$ (248,664)	\$ 613,529	\$ (3,902)	\$ 880,207
Issuance of stock for services rendered	37	834	—	—	—	834
Repurchase of common stock	(4,676)	—	(100,548)	—	—	(100,548)
Exercise of stock options	2	14	—	—	—	14
Issuance of shares for equity-based compensation	667	—	—	—	—	—
Equity-based compensation	—	13,498	—	—	—	13,498
Cumulative effect of accounting changes	—	—	—	534	—	534
Cash dividend declared	—	—	—	(31,091)	—	(31,091)
Components of comprehensive income:						
Net income	—	—	—	11,653	—	11,653
Other comprehensive loss	—	—	—	—	(6,038)	(6,038)
Total comprehensive income / (loss)	—	—	—	11,653	(6,038)	5,615
Balances as of September 28, 2019	63,173	\$ 533,590	\$ (349,212)	\$ 594,625	\$ (9,940)	\$ 769,063

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

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

	Fiscal		
	2019	2018	2017
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net income	\$ 11,653	\$ 56,676	\$ 126,099
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	20,304	19,015	16,257
Impairment charges	—	—	35,207
Equity-based compensation and employee benefits	14,332	11,685	11,722
(Excess tax benefits) / Reversal of excess tax benefits from stock based compensation	—	(50)	4,392
Adjustment for doubtful accounts	212	383	(136)
Adjustment for inventory valuation	2,657	4,897	10,925
Deferred taxes	8,825	22,519	(16,758)
Gain/(loss) on disposal of property, plant and equipment	20	(676)	(999)
Unrealized foreign currency translation	(3,325)	(2,002)	1,362
Share of results of equity-method investee	124	129	(190)
Changes in operating assets and liabilities, net of assets and liabilities assumed in businesses combinations:			
Accounts and notes receivable	47,395	(45,154)	(67,879)
Inventory	24,105	1,631	(47,425)
Prepaid expenses and other current assets	(490)	9,405	(8,468)
Accounts payable, accrued expenses and other current liabilities	(53,759)	(30,868)	63,425
Income taxes payable	(7,758)	77,968	3,946
Other, net	1,672	(2,059)	4,830
Net cash provided by operating activities	<u>65,967</u>	<u>123,499</u>	<u>136,310</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Acquisition of business, net of cash acquired	—	—	(27,119)
Purchases of property, plant and equipment	(11,742)	(20,496)	(25,590)
Proceeds from sales of property, plant and equipment	210	625	1,352
Purchase of equity investments	(5,000)	—	(1,312)
Purchase of short term investments	(619,000)	(684,000)	(305,000)
Maturity of short term investments	683,000	607,000	213,000
Net cash provided by / (used in) investing activities	<u>47,468</u>	<u>(96,871)</u>	<u>(144,669)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Payment on debts	(30,773)	(704)	(604)
Proceeds from exercise of common stock options	14	55	509
Repurchase of common stock	(99,897)	(90,310)	(18,197)
(Reversal of excess tax benefits) / Excess tax benefits from stock based compensation	—	—	(4,392)
Proceeds from short term debt	90,904	—	—
Common stock cash dividends paid	(31,566)	(8,176)	—
Net cash used in financing activities	<u>(71,318)</u>	<u>(99,135)</u>	<u>(22,684)</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	919	715	76
Changes in cash, cash equivalents and restricted cash	<u>43,036</u>	<u>(71,792)</u>	<u>(30,967)</u>
Cash, cash equivalents and restricted cash at beginning of period	321,148	392,940	423,907
Cash, cash equivalents and restricted cash at end of period	<u>\$ 364,184</u>	<u>\$ 321,148</u>	<u>\$ 392,940</u>
<b>CASH PAID FOR:</b>			
Interest	\$ 1,634	\$ 1,054	\$ 1,059
Income taxes	\$ 22,073	\$ 13,179	\$ 8,283

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



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**NOTE 1: BASIS OF PRESENTATION**

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

***Fiscal Year***

Each of the Company's first three fiscal quarters ends 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. In fiscal years consisting of 53 weeks, the fourth quarter will consist of 14 weeks. The 2019, 2018, and 2017 fiscal years ended on September 28, 2019, September 29, 2018 and September 30, 2017, respectively.

***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 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 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, 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 are used as the basis for making estimates, and on an ongoing basis, management evaluates these estimates. Actual results may differ from these estimates.

***Vulnerability to Certain Concentrations***

Financial instruments which may subject the Company to concentrations of credit risk as of September 28, 2019 and September 29, 2018 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

***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 statement of operations as the impact of the hedged transaction. Derivatives that we designate as cash flow hedges are classified in the consolidated 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:

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

- 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. The Company is also subject to concentrations of customers and sales to a few geographic locations, which could also impact the collectability of certain receivables. 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 fiscal years ended September 28, 2019 and September 29, 2018, no "triggering" events occurred.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

***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 amount, and recognizing an impairment charge for the amount by which the carrying amount of the reporting unit 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 customers' facilities. 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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

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 fiscal year ended September 28, 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 the deferred tax asset 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 net deferred tax assets in the future, an adjustment to the deferred tax asset 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 9 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 consolidated 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

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

value of acquired net operating assets, property and equipment, deferred revenue, intangible assets and related deferred tax balances, useful lives of 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***Income Taxes*

In October 2016, the FASB issued ASU 2016-16, *Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory*. The new guidance is effective for the Company in the first quarter of fiscal 2019 and requires the tax effects of intercompany transactions (other than transfers of inventory) to be recognized currently. The Company has adopted the modified retrospective approach for the transition based on the new guidance and, as of the beginning of the period of adoption, has recorded the cumulative effect of adjustments related to intra-entity transfers of intangible and fixed assets of \$0.5 million in prior years as an increase to retained earnings.

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 a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the TCJA and requires entities to provide certain disclosures regarding stranded tax effects, if any. The ASU is effective for us in the first quarter of 2020. However, we do not expect the adoption of this ASU to have a material impact on our financial statements.

*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*, which 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.

The Company will adopt these ASUs utilizing the modified retrospective transition method through a cumulative-effect adjustment at the beginning of its first fiscal quarter of 2020 and not restate prior periods. In addition, we will elect 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. The adoption of these ASUs is expected to result in an increase to our consolidated balance sheet 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.

*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. Early adoption is permitted beginning in our first fiscal quarter of 2020. We do not expect the adoption of this ASU itself to have a material impact on our financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (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. The new guidance will be effective for us beginning in our first quarter of fiscal 2020, and early adoption is permitted in any interim period. We do not expect the adoption of this ASU to have a material impact on our financial statements.

*Revenue Recognition*

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which amends the accounting standards for revenue recognition. ASU 2014-09 is based on principles that govern the recognition of revenue at an amount to which an entity expects to be entitled when products are transferred to customers.

Subsequently, the FASB has issued the following standards related to ASU 2014-09: ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations* (“ASU 2016-08”); ASU 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing* (“ASU 2016-10”); ASU 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients* (“ASU 2016-12”); and ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers* (“ASU 2016-20” and collectively, the “new revenue standards”).

The Company has performed an evaluation of this ASU (and related ASUs) and its impact on the financial statements. This included identifying contracts and performance obligations and reviewing the applicable revenue streams. We have completed our assessment and implemented policies, processes, and controls to support the standard's measurement and disclosure requirements. The new standard was adopted in the first quarter of fiscal 2019 using a modified retrospective approach.

Based on our review of all our customer agreements for the affected periods, our revenue from sales of our products, such as equipment and spare parts, will continue to be recognized at a point in time, generally upon shipment or delivery to customers or distributors, depending upon the terms of the sales order, consistent with our current revenue recognition model. Revenue related to the sale of services will generally continue to be recognized over time as the services are performed. In certain instances, where collection of consideration is not probable, recognition of revenue may occur later under the new model after we have completed all of our obligations under the contract. However, when adopting the new standard, we did not identify any balances where collection of consideration is not probable. This ASU did not have a material impact on the amount and timing of revenue recognized in the Company's consolidated 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 fiscal 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 financial statements.

**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**NOTE 2: BALANCE SHEET COMPONENTS**

The following tables reflect the components of significant balance sheet accounts as of September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	As of	
	September 28, 2019	September 29, 2018
Short term investments, available-for-sale <sup>(1)</sup>	\$ 229,000	\$ 293,000
Inventories, net:		
Raw materials and supplies	\$ 52,853	\$ 63,894
Work in process	32,026	37,829
Finished goods	33,742	40,357
	118,621	142,080
Inventory reserves	(29,313)	(26,889)
	\$ 89,308	\$ 115,191
Property, plant and equipment, net:		
Land	\$ 2,182	\$ 2,182
Buildings and building improvements <sup>(2)</sup>	41,961	41,616
Leasehold improvements <sup>(2)</sup>	24,441	23,561
Data processing equipment and software	36,302	35,469
Machinery, equipment, furniture and fixtures	71,465	68,666
Construction in progress	6,512	6,940
	182,863	178,434
Accumulated depreciation	(110,493)	(102,367)
	\$ 72,370	\$ 76,067
Accrued expenses and other current liabilities:		
Accrued customer obligations <sup>(3)</sup>	\$ 26,292	\$ 34,918
Wages and benefits	18,188	44,505
Commissions and professional fees	2,024	5,549
Dividends payable	7,582	8,057
Deferred rent	1,721	1,847
Severance	1,500	1,415
Other	7,226	9,687
	\$ 64,533	\$ 105,978

- (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 fiscal years ended 2019 and 2018.
- (2) Certain balances as at September 29, 2018 relating to property, plant and equipment have been reclassified. These reclassifications have no impact to the Consolidated Balance Sheet as at September 29, 2018.
- (3) Represents customer advance payments, customer credit program, accrued warranty expense and accrued retrofit obligations.



KULICKE AND SOFFA INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

**NOTE 3: GOODWILL AND INTANGIBLE ASSETS**

***Goodwill***

Intangible assets classified as goodwill are not amortized. 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 assessment in the fourth quarter of fiscal 2019 and concluded that no impairment charge was required. During the fiscal year ended September 28, 2019, 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.

The following table summarizes the Company's recorded goodwill by reportable segments as of September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	Capital Equipment	APS
Balance at September 29, 2018	\$ 30,159	\$ 26,391
Other	(679)	(180)
Balance at September 28, 2019	\$ 29,480	\$ 26,211

***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 September 28, 2019 and September 29, 2018:

<i>(dollar amounts in thousands)</i>	As of		Average estimated
	September 28, 2019	September 29, 2018	useful lives <i>(in years)</i>
Developed technology	\$ 87,209	\$ 90,500	7.0 to 15.0
Accumulated amortization	(48,718)	(45,229)	
Net developed technology	\$ 38,491	\$ 45,271	
Customer relationships	\$ 35,180	\$ 36,131	5.0 to 6.0
Accumulated amortization	(31,862)	(29,820)	
Net customer relationships	\$ 3,318	\$ 6,311	
Trade and brand names	\$ 7,219	\$ 7,377	7.0 to 8.0
Accumulated amortization	(6,377)	(6,088)	
Net trade and brand names	\$ 842	\$ 1,289	
Other intangible assets	\$ 2,500	\$ 2,500	1.9
Accumulated amortization	(2,500)	(2,500)	
Net wedge bonder other intangible assets	\$ —	\$ —	
Net intangible assets	\$ 42,651	\$ 52,871	

The following table reflects estimated annual amortization expense related to intangible assets as of September 28, 2019:

**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

<i>(in thousands)</i>	<u>As of</u> <u>September 28, 2019</u>
Fiscal 2020	\$ 7,196
Fiscal 2021	5,212
Fiscal 2022	4,271
Fiscal 2023	4,177
Fiscal 2024 and thereafter	21,795
Total amortization expense	<u>\$ 42,651</u>

**NOTE 4: CASH, CASH EQUIVALENTS, RESTRICTED CASH 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, restricted cash and short-term investments consisted of the following as of September 28, 2019:

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

(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.

**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

Cash, cash equivalents, restricted cash and short-term investments consisted of the following as of September 29, 2018:

<i>(dollar amounts in thousands)</i>	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Estimated Fair Value</u>
Current assets:				
Cash	\$ 42,446	\$ —	\$ —	\$ 42,446
Cash equivalents:				
Money market funds <sup>(1)</sup>	209,172	—	(5)	209,167
Time deposits <sup>(2)</sup>	69,017	—	—	69,017
Total cash and cash equivalents	<u>\$ 320,635</u>	<u>\$ —</u>	<u>\$ (5)</u>	<u>\$ 320,630</u>
Restricted Cash <sup>(2)</sup>	<u>\$ 518</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 518</u>
Total restricted cash	<u>\$ 518</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 518</u>
Short-term investments <sup>(2)</sup> :				
Time deposits	\$ 197,000	\$ —	\$ —	\$ 197,000
Deposits <sup>(3)</sup>	96,000	—	—	96,000
Total short-term investments	<u>\$ 293,000</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 293,000</u>
Total cash, cash equivalents, restricted cash and short-term investments	<u>\$ 614,153</u>	<u>\$ —</u>	<u>\$ (5)</u>	<u>\$ 614,148</u>

- (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 September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	<u>As of</u>	
	<u>September 28, 2019</u>	<u>September 29, 2018</u>
Non-marketable equity securities <sup>(1)</sup>	\$ 5,000	\$ —
Equity method investments	1,250	1,373
Total	<u>\$ 6,250</u>	<u>\$ 1,373</u>

- (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 fiscal year ended September 28, 2019, 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 fiscal year ended September 28, 2019.

***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.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

**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 foreign 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 Statements of Operations as the impact of the hedged transaction.

The fair value of derivative instruments on our Consolidated Balance Sheet as of September 28, 2019 and September 29, 2018 is as follows:

<i>(in thousands)</i>	As of			
	September 28, 2019		September 29, 2018	
	Notional Amount	Fair Value Liability Derivatives <sup>(1)</sup>	Notional Amount	Fair Value Liability Derivatives <sup>(1)</sup>
Derivatives designated as hedging instruments:				
Foreign exchange forward contracts <sup>(2)</sup>	\$ 33,834	\$ 597	\$ 43,095	\$ 1,071
Total derivatives	\$ 33,834	\$ 597	\$ 43,095	\$ 1,071

(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 Balance Sheet.

(2) Hedged amounts expected to be recognized into earnings within the next twelve months.

The effect of derivative instruments designated as cash flow hedges in our Consolidated Statements of Operations for the fiscal year ended September 28, 2019 and September 29, 2018 was as follows:

<i>(in thousands)</i>	Fiscal	
	2019	2018
Foreign exchange forward contract in cash flow hedging relationships:		
Net loss recognized in OCI, net of tax <sup>(1)</sup>	\$ (741)	\$ (669)
Net (loss) / gain reclassified from accumulated OCI into earnings, net of tax <sup>(2)</sup>	\$ (1,215)	\$ 1,755

(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: 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

# KULICKE AND SOFFA INDUSTRIES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

renew for 2 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 ASC No. 840, *Leases* ("ASC 840"), we have classified the Building on our 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 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 is \$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.

### **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 September 28, 2019 and September 29, 2018, the outstanding amount was \$3.1 million and \$4.0 million respectively.

### **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 or any breach of a representation or warranty under the Facility Agreements. As of September 28, 2019, the outstanding amount under the Facility Agreements is \$60.9 million.

## **NOTE 9: SHAREHOLDERS' EQUITY AND EMPLOYEE BENEFIT PLANS**

### **Common Stock and 401(k) Retirement Income Plans**

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 fiscal 2019 and 2018:

(in thousands)	Fiscal	
	2019	2018
Cash	\$ 1,648	\$ 1,610

### **Share 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 Company's 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.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

During the fiscal year ended September 28, 2019, the Company repurchased a total of 4.7 million shares of common stock at a cost of \$100.5 million. The share repurchases were recorded in the periods they were delivered and accounted for as treasury stock in the Company's Consolidated 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 September 28, 2019, our remaining share repurchase authorization under the Program was approximately \$97.1 million.

**Dividends**

On August 7, 2019, May 20, 2019, February 28, 2019 and December 12, 2018, the Board of Directors declared a quarterly dividend \$0.12 per share of common stock. During the fiscal year ended September 28, 2019, the Company declared dividends of \$0.48 per share of common stock. 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 stockholders.

**Accumulated Other Comprehensive Income**

The following table reflects accumulated other comprehensive income / (loss) reflected on the Consolidated Balance Sheets as of September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	As of	
	September 28, 2019	September 29, 2018
Loss from foreign currency translation adjustments	\$ (7,745)	\$ (1,211)
Unrecognized actuarial loss on pension plan, net of tax	(1,598)	(1,620)
Unrealized loss on hedging	(597)	(1,071)
Accumulated other comprehensive loss	\$ (9,940)	\$ (3,902)

**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 September 28, 2019, 4.0 million shares of common stock are available for grant to the Company's employees and directors under the 2017 Equity Plan, including previously registered shares that have been carried forward for issuance under 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 which 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.
- In general, Performance-based Restricted Stock entitles the employee to receive common shares of the Company on the three-year anniversary of the grant date (if employed by the Company) if return on invested capital and revenue growth

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

targets set by the Management Development and Compensation Committee (“MDCC”) of the Board of Directors on the date of grant are met. If return on invested capital and revenue growth targets are not met, Performance-based Restricted Stock does not vest. Certain 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 PSUs do not vest.

Equity-based compensation expense recognized in the Consolidated Statements of Operations for fiscal 2019, 2018, and 2017 was based upon awards ultimately expected to vest. Following the early adoption in the first quarter of fiscal 2018 of ASU 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, forfeitures have been accounted for when they occur.

The following table reflects total equity-based compensation expense, which includes Relative TSR PSUs, Time-based RSUs, Special/Growth PSUs, Performance-based Restricted Stock and common stock, included in the Consolidated Statements of Operations for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Cost of sales	\$ 632	\$ 515	\$ 463
Selling, general and administrative	10,503	8,548	9,015
Research and development	3,197	2,622	2,244
Total equity-based compensation expense	\$ 14,332	\$ 11,685	\$ 11,722

The following table reflects equity-based compensation expense, by type of award, for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Relative TSR PSUs	\$ 4,220	\$ 3,583	\$ 3,480
Time-based RSUs	8,603	7,027	7,492
Special/Growth PSUs	675	295	—
Common stock	834	780	750
Total equity-based compensation expense	\$ 14,332	\$ 11,685	\$ 11,722

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Equity-Based Compensation: Relative TSR PSUs

The following table reflects Relative TSR PSUs activity for fiscal 2019, 2018, and 2017:

	<i>Number of shares (in thousands)</i>	<i>Unrecognized compensation expense (in thousands)</i>	<i>Average remaining service period (in years)</i>	<i>Weighted average grant date fair value per share</i>
Relative TSR PSUs outstanding as of October 1, 2016	484	\$ 2,924	1.0	
Granted	388			\$ 13.47
Forfeited or expired	(3)			
Vested	(196)			
Relative TSR PSUs outstanding as of September 30, 2017	673	\$ 6,204	1.4	
Granted	180			\$ 29.60
Forfeited or expired	(146)			
Vested	(168)			
Relative TSR PSUs outstanding as of September 29, 2018	539	\$ 4,629	1.1	
Granted	166			\$ 23.15
Forfeited or expired	(27)			
Vested	(117)			
Relative TSR PSUs outstanding as of September 28, 2019	561	\$ 4,136	0.9	

The following table reflects the assumptions used to calculate compensation expense related to the Company's Relative TSR PSUs issued during fiscal 2019, 2018, and 2017:

	Fiscal		
	2019	2018	2017
Grant Price	\$ 20.87	\$ 19.65	\$ 12.51
Expected dividend yield <sup>(1)</sup>	2.30%	0.12%	N/A
Expected stock price volatility	34.20%	31.71%	30.39%
Risk-free interest rate	2.92%	1.68%	0.96%

(1) The expected dividend yield for fiscal 2018 includes the effect of 10,511 grants which were issued in the quarter ended September 29, 2018 with an assumed dividend yield of 1.91%



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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

*Equity-Based Compensation: Time-based RSUs*

The following table reflects Time-based RSUs activity for fiscal 2019, 2018, and 2017:

	<i>Number of shares (in thousands)</i>	<i>Unrecognized compensation expense (in thousands)</i>	<i>Average remaining service period (in years)</i>	<i>Weighted average grant date fair value per share</i>
Time-based RSUs outstanding as of October 1, 2016	1,015	\$ 6,440	1.5	
Granted	715			\$ 13.32
Forfeited or expired	(50)			
Vested	(600)			
Time-based RSUs outstanding as of September 30, 2017	1,080	\$ 7,770	1.5	
Granted	459			\$ 22.32
Forfeited or expired	(87)			
Vested	(542)			
Time-based RSUs outstanding as of September 29, 2018	910	\$ 9,038	1.4	
Granted	521			\$ 20.95
Forfeited or expired	(42)			
Vested	(442)			
Time-based RSUs outstanding as of September 28, 2019	947	\$ 10,555	1.4	

*Equity-Based Compensation: Special/Growth PSUs*

The following table reflects Special/Growth PSUs activity for fiscal 2019, 2018, and 2017:

	<i>Number of shares (in thousands)</i>	<i>Unrecognized compensation expense (in thousands)</i>	<i>Average remaining service period (in years)</i>	<i>Weighted average grant date fair value per share</i>
Special/Growth PSUs outstanding as of September 30, 2017	—			
Granted	60			\$ 22.57
Forfeited or expired	(14)			
Vested	—			
Special/Growth PSUs outstanding as of September 29, 2018	46	\$ 702	2.1	
Granted	\$ 55			\$ 21.07
Forfeited or expired	\$ (4)			
Vested	\$ —			
Special/Growth PSUs outstanding as of September 28, 2019	\$ 97	\$ 1,128	1.6	

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table reflects employee stock option activity for fiscal 2019, 2018, and 2017:

	<i>Number of shares (in thousands)</i>	Weighted average exercise price	<i>Average remaining contractual life (in years)</i>	<i>Aggregate intrinsic value (in thousands)</i>
Options outstanding as of October 1, 2016	90	\$ 8.41		
Exercised	(61)	\$ 8.31		\$ 531
Forfeited or expired	(13)	\$ 8.50		
Options outstanding as of September 30, 2017	16	\$ 8.73		
Exercised	(6)	\$ 8.74		\$ 73
Forfeited or expired	(8)	\$ 8.74		
Options outstanding as of September 29, 2018	2	\$ 8.64		
Exercised	(2)	\$ 8.64		\$ 24
Forfeited or expired	—	\$ —		
Options outstanding as of September 28, 2019	—	\$ —	—	\$ —
Options vested and expected to vest as of September 28, 2019	—	\$ —	—	\$ —
Options exercisable as of September 28, 2019	—	\$ —	—	\$ —
In the money exercisable options as of September 28, 2019	—	\$ —	—	\$ —

Intrinsic value of stock options exercised is determined by calculating the difference between the market value of the Company's stock price at the time an option is exercised and the exercise price, multiplied by the number of shares.

As of September 28, 2019, there were no unvested employee stock options.

*Equity-Based Compensation: Non-Employee Directors*

The 2017 Equity Plan provides for the grant of common shares to each non-employee director upon initial election to the board and on the first business day of each calendar quarter while serving on the board. The grant to a non-employee director upon initial election to the board is that number of common shares closest in value to, without exceeding, \$120,000. The quarterly grant to a non-employee director upon the first business day of each calendar quarter is that number of common shares closest in value to, without exceeding, \$37,000.

The following table reflects shares of common stock issued to non-employee directors and the corresponding fair value for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Number of common shares issued	37	33	45
Fair value based upon market price at time of issue	\$ 834	\$ 780	\$ 750

**Pension Plan**

The following table reflects the Company's defined benefits pension obligations, mainly in Switzerland and Taiwan, as of September 28, 2019 and September 29, 2018:

<i>(in thousands)</i>	As of	
	September 28, 2019	September 29, 2018
Switzerland pension obligation	\$ 1,962	\$ 1,980
Taiwan pension obligation	1,191	1,256

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

**Other Plans**

Some of the Company's other foreign subsidiaries have retirement plans that are integrated with and supplement the benefits provided by laws of the various countries. These other plans are not required to report nor do they determine the actuarial present value of accumulated benefits or net assets available for plan benefits as they are defined contribution plans.

**NOTE 10: 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 fiscal years ended September 28, 2019, and September 29, 2018, service revenue is not material. Please refer to Note 1: Basis of Presentation- *Revenue Recognition*, for additional disclosure on the Company's revenue recognition policy.

The Company reports revenue based on our reportable segments. The Company believes that reporting revenue on this basis provides information about how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. Please refer to Note 14: Segment Information, for disclosure of revenue by segment.

**Contract Liabilities**

Our contract liabilities are primarily related to payments received 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 fiscal year ended September 28, 2019:

<i>(in thousands)</i>	Fiscal 2019
Contract liabilities, beginning of period	\$ 997
Revenue recognized	(7,935)
Additions	8,834
Contract liabilities, end of period	\$ 1,896

**NOTE 11: 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.

The following tables reflect a reconciliation of the shares used in the basic and diluted net income per share computation for fiscal 2019, 2018, and 2017:

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

<i>(in thousands, except per share)</i>	Fiscal					
	2019		2018		2017	
	Basic	Diluted	Basic	Diluted	Basic	Diluted
<b>NUMERATOR:</b>						
Net income	\$ 11,653	\$ 11,653	\$ 56,676	\$ 56,676	\$ 126,099	\$ 126,099
<b>DENOMINATOR:</b>						
Weighted average shares outstanding - Basic	65,286	65,286	69,380	69,380	70,906	70,906
Dilutive effect of Equity Plans		662		1,039		1,157
Weighted average shares outstanding - Diluted		65,948		70,419		72,063
<b>EPS:</b>						
Net income per share - Basic	\$ 0.18	\$ 0.18	\$ 0.82	\$ 0.82	\$ 1.78	\$ 1.78
Effect of dilutive shares		\$ —		\$ (0.02)		\$ (0.03)
Net income per share - Diluted		\$ 0.18		\$ 0.80		\$ 1.75

**NOTE 12: OTHER FINANCIAL DATA**

The following table reflects other financial data for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Incentive compensation expense	\$ 423	\$ 25,607	\$ 29,612
Rent expense	4,889	4,914	5,071
Warranty and retrofit expense	13,030	13,110	13,740

**NOTE 13: INCOME TAXES**

The following table reflects U.S and foreign income before income taxes for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
United States	\$ (14,125)	\$ 25,211	\$ (4,114)
Foreign	48,812	152,338	122,629
Income before tax	\$ 34,687	\$ 177,549	\$ 118,515

The following table reflects the current and deferred components of provision for (benefit from) income taxes for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
<b>Current:</b>			
Federal	\$ 6,580	\$ 83,159	\$ (3,975)
State	214	58	64
Foreign	6,384	16,980	13,290
<b>Deferred:</b>			
Federal	2,959	23,346	(15,374)
State	—	(2)	40
Foreign	6,773	(2,797)	(1,439)
Provision for (benefit from) income taxes	\$ 22,910	\$ 120,744	\$ (7,394)

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table reconciles the provision for (benefit from) income taxes with the expected income tax provision computed based on the applicable U.S. federal statutory tax rate for fiscal 2019, 2018, and 2017:

<i>(dollar amounts in thousands)</i>	Fiscal		
	2019	2018	2017
Expected income provision based on the U.S. federal statutory tax rate	\$ 7,284	\$ 43,568	\$ 41,358
Effect of earnings of foreign subsidiaries subject to different tax rates	(4,335)	(12,947)	(22,832)
Benefit from tax incentives	(5,084)	(20,429)	(23,294)
Benefit from research and development tax credits	(3,041)	(2,785)	(1,859)
Benefit from foreign tax credits	(22,744)	(3,939)	(26,119)
U.S. one-time transition tax	9,369	101,854	—
Remeasurement of deferred taxes	5,480	2,760	—
Non-deductible goodwill impairment	—	—	8,805
Valuation allowance	25,289	7,366	6,458
Foreign operations (withholding taxes, taxes on unrepatriated foreign earnings, and deemed dividends)	8,578	5,746	6,039
Unrecognized tax benefit	156	530	2,936
Non-deductible items	2,248	(758)	778
Other, net	(290)	(222)	336
Provision for (benefit from) income taxes	\$ 22,910	\$ 120,744	\$ (7,394)
Effective tax rate	66.0%	68.0%	(6.2)%

On December 22, 2017, the TCJA was signed into law. Among the many U.S. tax law changes, the TCJA reduced the U.S. federal statutory tax rate from 35% to 21%, imposed a one-time transition tax on deemed repatriation of previously untaxed accumulated earnings and profits of certain foreign subsidiaries, and created a new foreign minimum tax. In accordance with Staff Accounting Bulletin No. 118 ("SAB 118"), the accounting for the tax effects of the TCJA was completed in the first quarter of fiscal 2019.

In fiscal 2019, the Company recorded an additional tax expense of \$9.4 million due to newly issued TCJA regulations and guidance on the computation of the U.S. one-time transition tax. The Company recognized an aggregate tax expense for fiscal 2018 and 2019 of \$114.0 million, comprised primarily of \$2.8 million from the re-measurement of U.S. deferred tax assets and liabilities to reflect the decrease in the U.S. federal statutory tax rate in fiscal 2018, and \$111.2 million related to the U.S. one-time transition tax on deemed repatriation of previously untaxed accumulated earnings and profits of certain foreign subsidiaries, net of related foreign tax credits and unrecognized tax benefit in fiscal 2018 and 2019. The Company also recorded \$5.5 million in fiscal 2019 to revalue certain foreign deferred assets and liabilities to reflect enacted foreign statutory tax rates in Singapore and the Netherlands.

During fiscal 2019, the Company completed its evaluation of the future cash needs of its U.S. and foreign operations, the alignment of cash balances with the Company's long-term capital allocation strategy, and the impact of the TCJA which generally allows U.S. corporations to make distributions without incurring additional U.S. income tax. As a result of this reassessment, a portion of the Company's undistributed foreign earnings are no longer deemed to be indefinitely reinvested outside the U.S. as of September 28, 2019. The Company recorded \$0.7 million of tax expense in the second quarter of fiscal 2019 as part of the initial change in assertion and \$1.8 million of tax expense cumulatively by the end of fiscal 2019 primarily due to subsequent changes in foreign exchange rates from the date of the initial change.

Further, we operate in a number of foreign jurisdictions, including Singapore, where we have a tax incentive that allows for a reduced tax rate on certain classes of income, provided the Company meets certain employment and investment conditions through the expiration date in fiscal 2020. This tax incentive arrangement may be renewed subject to the agreement of the Singapore government on additional requirements that must be satisfied. In fiscal 2019, 2018, and 2017, the tax incentive arrangement helped to reduce the Company's provision for income taxes by \$5.0 million or \$0.08 per share, \$20.4 million or \$0.29 per share and \$23.3 million or \$0.33 per share, respectively.

The following table reflects deferred tax balances based on the tax effects of cumulative temporary differences for fiscal 2019 and 2018:

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

<i>(in thousands)</i>	Fiscal	
	2019	2018
Accruals and reserves	\$ 5,514	\$ 6,652
Tax credit carryforwards	23,448	4,532
Net operating loss carryforwards	36,050	39,856
Gross deferred tax assets	\$ 65,012	\$ 51,040
Valuation allowance	\$ (58,411)	\$ (37,249)
Deferred tax assets, net of valuation allowance	\$ 6,601	\$ 13,791
Taxes on undistributed foreign earnings	\$ (24,542)	\$ (21,988)
Fixed and intangible assets	(7,704)	(8,377)
Deferred tax liabilities	\$ (32,246)	\$ (30,365)
Net deferred tax liabilities	\$ (25,645)	\$ (16,574)
Reported as		
Deferred tax assets	\$ 6,409	\$ 9,017
Deferred tax liabilities	(32,054)	(25,591)
Net deferred tax liabilities	\$ (25,645)	\$ (16,574)

As of September 28, 2019, the Company has foreign net operating loss carryforwards of \$110.6 million, state net operating loss carryforwards of \$146.5 million, and U.S. federal and state tax credit carryforwards of \$7.8 million that can be used to offset future income tax obligations. These net operating loss and tax credit carryforwards can be utilized prior to their expiration dates in fiscal years 2020 through 2035, with the exception of certain credits and foreign net operating losses that can be carried forward indefinitely. The Company has recorded valuation allowances against certain foreign and state net operating loss carryforwards and state tax credits which are expected to expire unutilized.

The Company continues to evaluate the realizability of its net deferred tax assets at each reporting date and records a benefit for deferred tax assets to the extent it has projected future taxable income or deferred tax liabilities that provide a source of future income to benefit such deferred tax assets. As a result of this analysis, the Company continues to maintain a valuation allowance against certain state and foreign deferred tax assets as the realization of these assets is not more likely than not given uncertainty of future apportioned earnings in these jurisdictions.

The following table reconciles the beginning and ending balances of the Company's unrecognized tax benefit, excluding related accrued interest and penalties, for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Unrecognized tax benefit, beginning of year	\$ 13,038	\$ 12,062	\$ 7,453
Additions for tax positions, current year	410	1,482	3,657
Additions for tax positions, prior year	—	—	1,834
Reductions for tax positions, prior year	(523)	(506)	(882)
Unrecognized tax benefit, end of year	\$ 12,925	\$ 13,038	\$ 12,062

The Company recognizes interest and penalties related to potential income tax liabilities as a component of unrecognized tax benefit and in provision for income taxes. For the fiscal year ended September 28, 2019, the Company recognized \$1.4 million of accrued interest and penalties related to unrecognized tax benefit. The amount of interest and penalties related to unrecognized tax benefit recorded in the provision for income taxes was not material for any period presented.

As of September 28, 2019, approximately \$13.1 million of unrecognized tax benefit, including related interest and penalties, if recognized, would impact the Company's effective tax rate.

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

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

examinations. Given the number of years and numerous matters that remain subject to examination in various tax jurisdictions, we cannot practicably estimate the financial outcomes of these examinations.

The Company files a U.S. federal income tax return, as well as income tax returns in various state and foreign jurisdictions. For U.S. federal income tax returns purposes, tax years following fiscal 2016 remain subject to examination. For most state tax returns, tax years following fiscal 2001 remain subject to examination as a result of the generation of net operating loss carry-forwards. In the foreign jurisdictions where the Company files income tax returns, the statutes of limitations with respect to these jurisdictions vary from jurisdiction to jurisdiction and range from 4 to 6 years. The Company's foreign tax returns are currently under examination by tax authorities in multiple foreign jurisdictions. The Company believes that adequate provisions have been made for any adjustments that may result from the examination.

**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 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 following table reflects operating information by segment for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Net revenue:			
Capital Equipment	\$ 386,820	\$ 719,390	\$ 651,934
APS	153,232	169,731	157,107
Net revenue	<u>540,052</u>	<u>889,121</u>	<u>809,041</u>
Income from operations:			
Capital Equipment	(12,577)	132,563	107,115
APS	34,187	34,069	5,968
Income from operations	<u>\$ 21,610</u>	<u>\$ 166,632</u>	<u>\$ 113,083</u>

The following tables reflect capital expenditures, depreciation and amortization expense by segment for fiscal 2019, 2018, and 2017.

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Capital expenditures:			
Capital Equipment	\$ 5,380	\$ 7,029	\$ 14,415
APS	6,449	13,412	11,273
Capital expenditures	<u>\$ 11,829</u>	<u>\$ 20,441</u>	<u>\$ 25,688</u>

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Depreciation expense:			
Capital Equipment	\$ 7,584	\$ 7,435	\$ 6,306
APS	5,308	3,754	3,397
Depreciation expense	<u>\$ 12,892</u>	<u>\$ 11,189</u>	<u>\$ 9,703</u>

KULICKE AND SOFFA INDUSTRIES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Amortization expense:			
Capital Equipment	\$ 3,977	\$ 4,203	\$ 2,841
APS	3,435	3,623	3,713
Amortization expense	<u>\$ 7,412</u>	<u>\$ 7,826</u>	<u>\$ 6,554</u>

*Geographical information*

The following tables reflect destination sales to unaffiliated customers by country and long-lived assets by country for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
China	\$ 252,179	\$ 408,567	\$ 323,803
Taiwan	63,440	126,676	100,738
Malaysia	41,568	65,354	72,329
United States	36,393	68,774	57,728
Singapore	25,680	19,648	7,119
Korea	15,236	38,551	73,410
Germany	13,594	19,018	18,754
Hong Kong	12,096	14,194	14,314
Philippines	12,057	26,372	25,165
Vietnam	10,978	20,864	29,330
All other	56,831	81,103	86,351
Total destination sales to unaffiliated customers	<u>\$ 540,052</u>	<u>\$ 889,121</u>	<u>\$ 809,041</u>

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Long-lived assets:			
Singapore	\$ 25,620	\$ 30,240	\$ 31,553
United States	27,665	23,696	43,440
China	18,969	18,333	11,148
Israel	8,288	8,460	4,549
All other	6,981	6,944	6,899
Total long-lived assets	<u>\$ 87,523</u>	<u>\$ 87,673</u>	<u>\$ 97,589</u>

**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 related labor costs expected to be incurred to correct product failures during the warranty period.



**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table reflects the reserve for product warranty activity for fiscal 2019, 2018, and 2017:

<i>(in thousands)</i>	Fiscal		
	2019	2018	2017
Reserve for warranty, beginning of period	\$ 14,474	\$ 13,796	\$ 12,544
Provision for warranty	12,140	12,603	11,743
Utilization of reserve	(12,429)	(11,925)	(10,491)
Reserve for warranty, end of period	\$ 14,185	\$ 14,474	\$ 13,796

***Other Commitments and Contingencies***

The following table reflects obligations not reflected on the Consolidated Balance Sheet as of September 28, 2019:

<i>(in thousands)</i>	Total	Payments due by fiscal year				
		2020	2021	2022	2023	thereafter
Inventory purchase obligation (1)	\$ 83,278	\$ 83,278	\$ —	\$ —	\$ —	\$ —
Operating lease obligations (2)	16,273	4,089	2,576	2,182	1,967	5,459
Total	\$ 99,551	\$ 87,367	\$ 2,576	\$ 2,182	\$ 1,967	\$ 5,459

- (1) The Company orders inventory components in the normal course of its business. A portion of these orders are non-cancelable and a portion may have varying penalties and charges in the event of cancellation.
- (2) The Company has minimum rental commitments under various leases (excluding taxes, insurance, maintenance and repairs, which are also paid by the Company) primarily for various facility and equipment leases, which expire periodically through 2019 (not including lease extension options, if applicable).

Pursuant to ASC No. 840, *Leases*, for lessee's involvement in asset construction, the Company was considered the owner of the Building during the construction phase. The Building was completed on December 1, 2013 and Pte signed an agreement with the Landlord to lease from the Landlord approximately 198,000 square feet, representing approximately 70% of the Building. Following the completion of construction, we performed a sale-leaseback analysis pursuant to ASC 840 and determined that because of our continuing involvement, ASC 840 precluded us from derecognizing the asset and associated financing obligation. As such, we reclassified the asset from construction in progress to Property, Plant and Equipment and began to depreciate the building 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. As of September 28, 2019, we recorded a financing obligation related to the Building of \$15.0 million (see Note 8 above). The financing obligation is not reflected in the table above.

***Concentrations***

The following tables reflect significant customer concentrations as a percentage of net revenue for fiscal 2019, 2018, and 2017:

	Fiscal		
	2019	2018	2017
Haoseng Industrial Co., Ltd <sup>(1)</sup>	*	12.8%	10.1%

\* Represents less than 10% of total net revenue

(1) Distributor of the Company's products

**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table reflects significant customer concentrations as a percentage of total accounts receivable as of September 28, 2019 and September 29, 2018:

	As of	
	September 28, 2019	September 29, 2018
Xinye (HK) Electronics Co. <sup>(1)</sup>	16.0%	*
Forehope Electronic (Ningbo) Co., Ltd	15.3%	*
Super Power International Ltd. <sup>(1)</sup>	13.5%	13.6%
Haoseng Industrial Co., Ltd <sup>(1)</sup>	*	32.9%

\* Represents less than 10% of total accounts receivable

(1) Distributor of the Company's products

**KULICKE AND SOFFA INDUSTRIES, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**NOTE 16: SELECTED QUARTERLY FINANCIAL DATA (unaudited)**

Presented below is a summary of the unaudited quarterly financial information for fiscal 2019 and 2018 (in thousands, except per share amounts).

<i>(in thousands, except per share amounts)</i>	Fiscal 2019 for the Quarter Ended				Fiscal 2019
	December 29	March 30	June 29	September 28	
Net revenue	\$ 157,208	\$ 115,908	\$ 127,109	\$ 139,827	\$ 540,052
Gross profit	74,799	55,573	58,780	65,438	254,590
Income / (loss) from operations	14,555	(2,465)	1,827	7,693	21,610
Provision for income taxes	10,570	4,672	3,864	3,804	22,910
Net income / (loss)	\$ 7,517	\$ (3,555)	\$ 1,287	\$ 6,404	\$ 11,653
Net income / (loss) per share <sup>(1)</sup> :					
Basic	\$ 0.11	\$ (0.05)	\$ 0.02	\$ 0.10	\$ 0.18
Diluted	\$ 0.11	\$ (0.05)	\$ 0.02	\$ 0.10	\$ 0.18
Weighted average shares outstanding:					
Basic	67,176	65,930	64,683	63,401	65,286
Diluted	67,851	65,930	65,431	64,251	65,948

<i>(in thousands, except per share amounts)</i>	Fiscal 2018 for the Quarter Ended				Fiscal 2018
	December 30	March 30	June 30	September 29	
Net revenue	\$ 213,691	\$ 221,772	\$ 268,834	\$ 184,824	\$ 889,121
Gross profit	97,202	99,447	126,969	85,823	409,441
Income from operations	39,159	38,436	64,463	24,574	166,632
Provision for (benefit from) income taxes	110,412	4,800	7,282	(1,750)	120,744
Net (loss) / income	\$ (69,528)	\$ 36,313	\$ 60,256	\$ 29,635	\$ 56,676
Net (loss) / income per share <sup>(1)</sup> :					
Basic	\$ (0.99)	\$ 0.52	\$ 0.87	\$ 0.44	\$ 0.82
Diluted	\$ (0.99)	\$ 0.51	\$ 0.86	\$ 0.43	\$ 0.80
Weighted average shares outstanding:					
Basic	70,577	70,361	69,125	67,462	69,380
Diluted	70,577	71,425	70,302	68,675	70,419

(1) EPS for the year may not equal the sum of quarterly EPS due to changes in weighted share calculations.

**NOTE 17: SUBSEQUENT EVENTS**

On October 24, 2019, the Company entered into foreign exchange forward contracts with notional amounts of \$10.0 million. We 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 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

### **Item 9A. 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 September 28, 2019. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of September 28, 2019 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.

#### **Management's Report on Internal Control Over Financial Reporting**

The management of Kulicke and Soffa Industries, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America.

The Company's internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles; provide reasonable assurance that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management evaluated the effectiveness of the Company's internal control over financial reporting as of September 28, 2019. In making this assessment, management used the framework established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of our internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee of the Company's Board of Directors.

Based on that assessment, management has concluded that, as of September 28, 2019, the Company's internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of September 28, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report, which appears in Part II, Item 8 of this Form 10-K.

#### **Changes in Internal Control over Financial Reporting**

There has been no change in the Company's internal control over financial reporting during the three months ended September 28, 2019, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

### **Item 9B. OTHER INFORMATION**

None.

## PART III

### **Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Information required by Item 401 of Regulation S-K with respect to the directors and executive officers will appear under the heading “ITEM 1 - ELECTION OF DIRECTORS” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference. The other information required by Item 401 of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Item 405 of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE - Section 16(a) Beneficial Ownership Reporting Compliance” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Item 406 of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE - Code of Ethics” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Item 407(c)(3) of Regulation will appear under the headings “CORPORATE GOVERNANCE-Nominating and Governance Committee” and “Shareholder Proposals” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Items 407(d)(4) and (d)(5) of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE-Audit Committee” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

### **Item 11. EXECUTIVE COMPENSATION**

The information required by Item 402 of Regulation S-K will appear under the heading “COMPENSATION OF EXECUTIVE OFFICERS,” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Item 407(e)(4) of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE-Management Development and Compensation Committee Interlocks and Insider Participation” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Item 407(e)(5) of Regulation S-K will appear under the heading “MANAGEMENT DEVELOPMENT AND COMPENSATION COMMITTEE REPORT” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

### **Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required hereunder concerning security ownership of certain beneficial owners and management will appear under the headings “CORPORATE GOVERNANCE - Security Ownership Of Certain Beneficial Owners” and “CORPORATE GOVERNANCE - SECURITY OWNERSHIP OF DIRECTORS, NOMINEES AND EXECUTIVE OFFICERS”, in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference. The information required by this item relating to securities authorized for issuance under equity compensation plans is included under the heading “EQUITY COMPENSATION PLAN INFORMATION” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which is incorporated herein by reference.

### **Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE**

The information required by Item 404 of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE - Certain Relationships and Related Transactions” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

The information required by Section 407(a) of Regulation S-K will appear under the heading “CORPORATE GOVERNANCE - Board Matters” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

**Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required hereunder will appear under the heading “AUDIT AND RELATED FEES” in the Company's Proxy Statement for the 2020 Annual Meeting of Shareholders, which information is incorporated herein by reference.

## Part IV

### Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

	<u>Page</u>
(1) Financial Statements - Kulicke and Soffa Industries, Inc.:	
Report of Independent Registered Public Accounting Firm	32
Consolidated Balance Sheets as of September 28, 2019 and September 29, 2018	34
Consolidated Statements of Operations for fiscal 2019, 2018 and 2017	35
Consolidated Statements of Comprehensive Income for fiscal 2019, 2018 and 2017	36
Consolidated Statements of Changes in Shareholders' Equity for fiscal 2019, 2018 and 2017	37
Consolidated Statements of Cash Flows for fiscal 2019, 2018 and 2017	38
Notes to Consolidated Financial Statements	39
(2) Financial Statement Schedule:	
Schedule II - Valuation and Qualifying Accounts	72
All other schedules are omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or notes thereto.	
(3) Exhibits:	

EXHIBIT NUMBER	ITEM
3.1	The Company's Amended and Restated Articles of Incorporation, dated December 5, 2007, is incorporated herein by reference to Exhibit 3(i) to the Company's Annual Report on Form 10-K for the fiscal year ended September 29, 2007, SEC file number 000-00121.
3.2	The Company's Amended and Restated By-Laws, dated October 22, 2015, is incorporated herein by reference to Exhibit 3(ii) to the Company's Current Report on Form 8-K dated October 22, 2015.
4.1	Specimen Common Share Certificate of Kulicke and Soffa Industries Inc., is incorporated herein by reference to Exhibit 4 to the Company's Form-8A12G/A dated September 11, 1995, SEC file number 000-00121.
4.2	Description of the Company's securities.
10.1	2009 Equity Plan is incorporated herein by reference to Appendix A to the Company's Proxy Statement on Schedule 14A for the annual meeting of shareholders on February 10, 2009.*
10.2	Amendment No. 1 to the Kulicke and Soffa Industries, Inc. 2009 Equity Plan, effective September 15, 2009, is incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 18, 2009.*
10.3	Amendment No. 2 to the Kulicke and Soffa Industries, Inc. 2009 Equity Plan, effective September 30, 2009, is incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on September 18, 2009.*
10.4	Amendment No. 3 to the Kulicke and Soffa Industries, Inc. 2009 Equity Plan, effective September 21, 2012, in incorporated herein by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed on December 7, 2012.*
10.5	Form of Officer Restricted Share Unit Award Agreement regarding the 2009 Equity Plan, is incorporated herein by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K dated December 9, 2010.*
10.6	Form of Officer Restricted Share Unit Award Agreement regarding the 2009 Equity Plan, is incorporated herein by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K dated December 7, 2012.*
10.7	Kulicke & Soffa Industries, Inc. Executive Severance Pay Plan, dated as of August 9, 2011, is incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 12, 2011.*

- 10.8 Kulicke & Soffa Industries, Inc. Officer Severance Pay Plan, dated as of August 9, 2011, is incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 12, 2011.\*
- 10.9 Form of Change of Control Agreement, is incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on August 12, 2011.\*
- 10.10 Form of Officer Strategic Performance Share Unit Award Agreement regarding the 2009 Equity Plan is incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended December 29, 2012.\*
- 10.11 Form of Director Indemnification Agreement is incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 10, 2013.\*
- 10.12 Lease Agreement between DBS Trustee Limited, as trustee of Mapletree Industrial Trust, and the Kulicke & Soffa Pte. Ltd, dated December 1, 2013, is incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 5, 2013.
- 10.13 Lease Agreement Variation Letter between DBS Trustee Limited, as trustee of Mapletree Industrial Trust, and the Kulicke & Soffa Pte. Ltd, dated December 1, 2013, is incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 5, 2013.
- 10.14 Form of Officer Indemnification Agreement is incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 11, 2013.\*
- 10.15 Amended and Restated Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 8, 2014.\*
- 10.16 Share Sale and Purchase Agreement between Kulicke & Soffa Holdings, B.V. and Assembléon Holding B.V., dated December 29, 2014, incorporated herein by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarterly period ended December 27, 2014.
- 10.17 Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on September 25, 2015.\*
- 10.18 Kulicke & Soffa Industries, Inc. 2009 Equity Plan Restricted Share Unit Award Agreement, incorporated herein by reference to Exhibit 10.35 of the Company's Annual Report on Form 10-K for the fiscal year ended October 1, 2015.\*
- 10.19 Offer Letter between Kulicke and Soffa Industries, Inc. and Fusen Chen dated October 3, 2016, incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on October 3, 2016.\*
- 10.20 Agreement For Purchase and Sale of Real Property, dated January 11, 2017, between the Company and ARC KSFTWPA001, LLC, incorporated herein by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2016.
- 10.21 2017 Equity Plan is incorporated herein by reference to Appendix A to the Company's Proxy Statement on Schedule 14A for the annual meeting of shareholders on March 14, 2017.\*
- 10.22 Form of Performance Share Unit Award Agreement regarding the 2017 Equity Plan is incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on November 6, 2017.
- 10.23 Form of Restricted Share Unit Award Agreement regarding the 2017 Equity Plan is incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on November 6, 2017.
- 21 Subsidiaries of the Company.
- 23 Consent of PricewaterhouseCoopers LLP (Independent Registered Public Accounting Firm).
- 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).
- 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).
- 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.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          Inline XBRL for the cover page of this Annual Report on Form 10-K, included in the Exhibit 101 Inline XBRL Document Set.

\* Indicates a management contract or compensatory plan or arrangement

\*\* Copies of certain instruments defining the rights of holders of certain of our long-term debt are not filed herewith. We hereby agree to furnish a copy of any such instrument to the SEC upon request.

**KULICKE AND SOFFA INDUSTRIES, INC.**  
**Schedule II-Valuation and Qualifying Accounts**

	<u>Beginning of period</u>	<u>Charged to Costs and Expenses</u>	<u>Other Additions</u>	<u>Other Deductions</u>	<u>End of period</u>
<b>Fiscal 2019:</b>					
Allowance for doubtful accounts	\$ 385	\$ 212	\$ —	\$ — (1)	\$ 597
Inventory reserve	\$ 26,889	\$ 2,657	\$ —	\$ (233) (2)	\$ 29,313
Valuation allowance for deferred taxes	\$ 37,249	\$ — (3)	\$ 21,162	\$ —	\$ 58,411
<b>Fiscal 2018:</b>					
Allowance for doubtful accounts	\$ 79	\$ 383	\$ —	\$ (77) (1)	\$ 385
Inventory reserve	\$ 24,639	\$ 4,897	\$ —	\$ (2,647) (2)	\$ 26,889
Valuation allowance for deferred taxes	\$ 29,614	\$ — (3)	\$ 7,635	\$ —	\$ 37,249
<b>Fiscal 2017:</b>					
Allowance for doubtful accounts	\$ 506	\$ (136)	\$ —	\$ (291) (1)	\$ 79
Inventory reserve	\$ 21,080	\$ 10,925	\$ —	\$ (7,366) (2)	\$ 24,639
Valuation allowance for deferred taxes	\$ 27,381	\$ — (3)	\$ 2,233	\$ —	\$ 29,614

(1) Represents write-offs of specific accounts receivable.

(2) Sale or scrap of previously reserved inventory.

(3) Reflects the net increase in the valuation allowance primarily associated with the Company's U.S. tax credits, U.S. and foreign net operating losses and other deferred tax assets.

## 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.

By: /s/ FUSEN CHEN

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Fusen Chen  
President and Chief Executive Officer

Dated: November 15, 2019

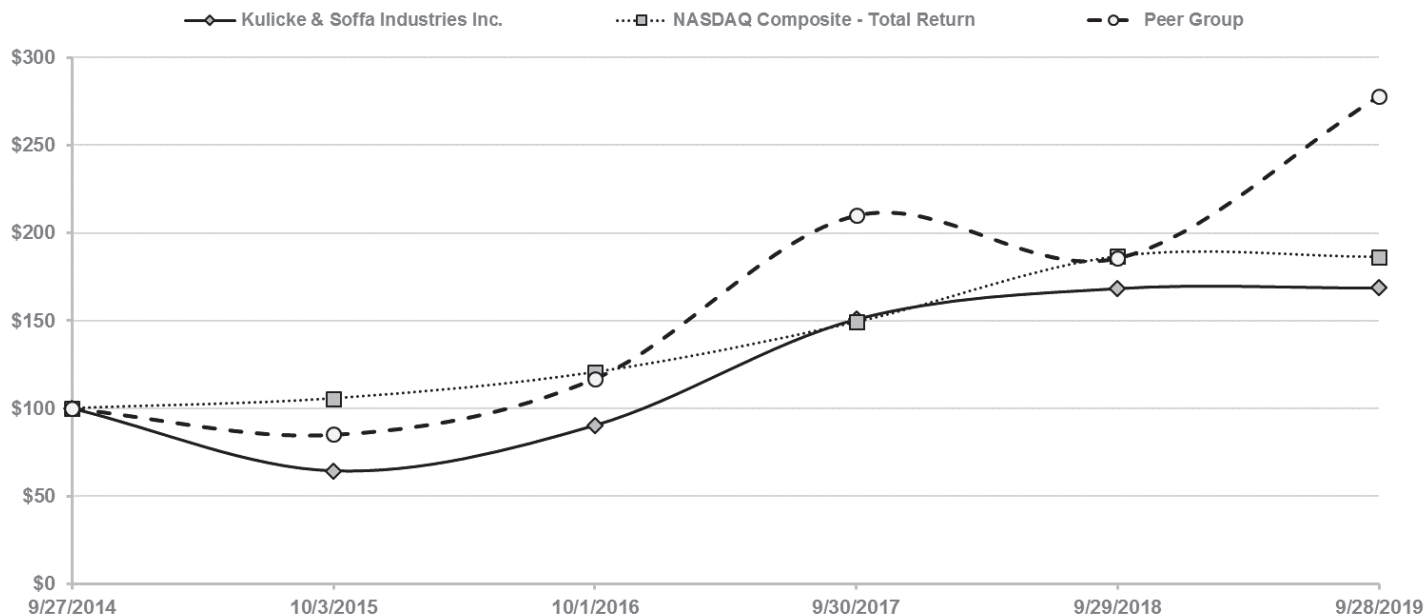
<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ FUSEN CHEN</u> Fusen Chen	President and Chief Executive Officer <u>(principal executive officer)</u>	November 15, 2019
<u>/s/ LESTER WONG</u> Lester Wong	Senior Vice President, Chief Financial Officer and General Counsel <u>(principal financial officer and principal accounting officer)</u>	November 15, 2019
<u>/s/ GARRETT E. PIERCE</u> Garrett E. Pierce	Director	November 15, 2019
<u>/s/ BRIAN R. BACHMAN</u> Brian R. Bachman	Director	November 15, 2019
<u>/s/ CHIN HU LIM</u> Chin Hu Lim	Director	November 15, 2019
<u>/s/ GREGORY F. MILZCIK</u> Gregory F. Milzcik	Director	November 15, 2019
<u>/s/ MUI SUNG YEO</u> Mui Sung Yeo	Director	November 15, 2019
<u>/s/ PETER T. KONG</u> Peter T. Kong	Director	November 15, 2019

## STOCK PERFORMANCE GRAPH

The graph set forth below compares, for fiscal years 2015 through 2019, the yearly change in the cumulative total returns to holders of common shares of the Company with the cumulative total return of a peer group selected by the Company and of the NASDAQ Composite Index. The peer group is focused on companies that manufacture equipment and materials similar to the equipment and materials manufactured by the Company, and is composed, in part, by reference to peer group lists that the Company believes are commonly used by institutional investors and financial research analysts when evaluating Company performance. The Company believes that the peer group provides a useful reference point for investors when evaluating Company performance across the semiconductor assembly equipment industry business cycle. The peer group is composed of ASM Pacific Technology Ltd., BE Semiconductor Industries, N.V., Brooks Automation Inc., Cohu, Inc., KLA Corp., LAM Research Corp., Xcerra Corporation, Shinkawa Ltd., Teradyne Inc. and Veeco Instruments Inc. The graph assumes that the value of the investment in the relevant stock or index was \$100 at September 27, 2014 and that all dividends were reinvested. Total returns are calculated based on the Kulicke & Soffa Industries, Inc. fiscal year calendar. For purposes of the peer group index, the peer group companies have been weighted based upon their relative market capitalization. The closing sale price of the Company's common shares as of September 28, 2019 was \$23.36.

### Comparison of 5 Year Cumulative Total Return

Among Kulicke & Soffa Industries, Inc.  
NASDAQ Composite Index and Peer Group  
Assumes \$100 invested on Sep. 27, 2014



**COMPANY INFORMATION**  
As of December 2019

<b>Corporate Locations</b>
<b>Corporate Headquarters</b> Kulicke and Soffa Industries, Inc. 23A Serangoon North Avenue 5 #01-01 Singapore 554369
<b>Technology Centers</b> Berg, Switzerland Eindhoven, Netherlands Haifa, Israel Fort Washington, Pennsylvania Santa Ana, California Singapore Suzhou, China
<b>Equipment Manufacturing Facilities</b> Eindhoven, Netherlands Santa Ana, California Singapore
<b>Expendable Tools Manufacturing Facilities</b> Haifa, Israel Suzhou, China

<b>Additional Information</b>
<b>Independent Accountants</b> PricewaterhouseCoopers, LLP Singapore
<b>Registrar and Transfer Agent</b> American Stock Transfer & Trust 6201 15 <sup>th</sup> Avenue Brooklyn, New York 11219 800-937-5449  NASDAQ Symbol: KLIC
<b>Supplemental Investor Information</b> An electronic copy of the 2019 Annual Report, Proxy Statement, SEC filings and supplemental investor information are available in the Investor section of the Company's corporate website at investor.kns.com.  For additional information please contact:  Investor Relations +1-215-784-7500 investor@kns.com

## LEADERSHIP TEAM

### EXECUTIVE LEADERSHIP

**Fusen E. Chen**  
President & Chief Executive Officer

**Chan Pin Chong**  
Executive Vice President & General  
Manager, K&S Products & Solutions

**Lester Wong**  
Senior Vice President, Chief Financial  
Officer & General Counsel

**Nelson Wong**  
Senior Vice President, Global Sales

**Bob Chylak**  
Vice President, Central Engineering  
& Chief Technology Officer

**Meng Kwong Han**  
Vice President & General Manager,  
Aftermarket Products & Services

**Cheam Tong Liang**  
Vice President, Corporate Strategy

**Lisa Lim**  
Vice President, Global Human  
Resources

**Shai Soloveizik**  
Vice President, Global Operations  
& Supply Chain

### BOARD OF DIRECTORS

**Garrett E. Pierce**  
Chairman of the Board  
Kulicke & Soffa Industries, Inc.  
Retired Chief Financial Officer  
Orbital ATK, Inc.

**Fusen E. Chen**  
President & Chief Executive Officer  
Kulicke & Soffa Industries, Inc.

**Brian R. Bachman**  
Private Investor

**Lim Chin Hu**  
Non-Executive Director  
Singapore Exchange Ltd.  
Non-Executive Director  
Singapore Technologies  
Engineering, Ltd.  
Non-Executive Director  
Citibank Singapore Limited

**Peter T. Kong**  
Retired President  
Global Components  
Arrow Electronics, Inc.

**Gregory F. Milczik**  
Retired President &  
Chief Executive Officer  
Barnes Group Inc.

**Yeo Mui Sung**  
Managing Director  
Omeyon Pte, Ltd.



**GLOBAL TECHNOLOGY CENTERS**

Berg, Switzerland

Eindhoven, Netherlands

Fort Washington, Pennsylvania

Haifa, Israel

Santa Ana, California

Singapore

Suzhou, China

