

1999

Annual

Report

and

Form 10K



1999

FIVE YEAR REVIEW

| Fiscal Year Ended September 30, | 1999 | 1998 | 1997 | 1996 ⁽¹⁾ | 1995 |
|---------------------------------|------|------|------|---------------------|------|
|---------------------------------|------|------|------|---------------------|------|

Statement of Operations Data:

| | | | | | |
|---|----------------|---------------|---------------|---------------|---------------|
| Net sales | \$398,917,000 | \$411,040,000 | \$501,907,000 | \$381,176,000 | \$304,509,000 |
| Research and development expense, net | \$37,188,000 | \$48,715,000 | \$46,030,000 | \$52,404,000 | \$30,884,000 |
| Research and development expense, net as a percentage of sales | 9.3% | 11.9% | 9.2% | 13.7% | 10.1% |
| Interest income (expense), net | \$3,547,000 | \$5,514,000 | \$820,000 | \$(164,000) | \$173,000 |
| Net income (loss) ⁽²⁾ | \$(16,946,000) | \$(5,440,000) | \$38,319,000 | \$11,847,000 | \$42,822,000 |
| Net Income as a percentage of sales | (4.2%) | (1.3%) | 7.6% | 3.1% | 14.1% |
| Net return on average equity | (6.0%) | (1.9%) | 17.4% | 8.4% | 43.5% |

Net Income (Loss) Per Share: ⁽³⁾

| | | | | | |
|---------|----------|----------|--------|--------|--------|
| Basic | \$(0.72) | \$(0.23) | \$1.84 | \$0.61 | \$2.44 |
| Diluted | \$(0.72) | \$(0.23) | \$1.79 | \$0.60 | \$2.23 |

Average Shares Outstanding

| | | | | | |
|---------|------------|------------|------------|------------|------------|
| Basic | 23,423,287 | 23,301,444 | 20,871,111 | 19,375,308 | 17,562,892 |
| Diluted | 23,423,287 | 23,301,444 | 21,428,035 | 19,788,146 | 19,589,724 |

Balance Sheet Data:

| | | | | | |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Working Capital | \$167,131,000 | \$182,181,000 | \$190,220,000 | \$113,804,000 | \$103,909,000 |
| Property, plant and equipment, net | \$67,485,000 | \$48,269,000 | \$45,648,000 | \$41,143,000 | \$25,519,000 |
| Total assets | \$378,145,000 | \$342,584,000 | \$376,819,000 | \$249,554,000 | \$191,029,000 |
| Long-term debt | 0 | 0 | 220,000 | 50,712,000 | 156,000 |
| Shareholders' equity | \$274,776,000 | \$287,910,000 | \$291,927,000 | \$147,489,000 | \$133,647,000 |

Other Selected Data:

| | | | | | |
|--------------------------|--------------|--------------|---------------|--------------|--------------|
| Backlog | \$93,000,000 | \$54,000,000 | \$118,000,000 | \$69,000,000 | \$84,700,000 |
| Current ratio | 2.78/1 | 4.53/1 | 3.32/1 | 3.33/1 | 2.85/1 |
| Capital expenditures | \$10,891,000 | \$16,062,000 | \$13,516,000 | \$18,028,000 | \$10,777,000 |
| Depreciation expense | \$13,104,000 | \$10,896,000 | \$8,945,000 | \$7,179,000 | \$4,730,000 |
| Book value per share | \$11.70 | \$12.32 | \$12.56 | \$7.59 | \$6.92 |
| Total shares outstanding | 23,489,180 | 23,367,093 | 23,237,173 | 19,432,959 | 19,309,910 |
| Number of employees | 2,239 | 2,057 | 2,229 | 1,897 | 1,750 |

(1) IN FISCAL 1996, THE COMPANY ACQUIRED AMERICAN FINE WIRE CORPORATION.

(2) IN FISCAL 1997 AND 1998, THE COMPANY RECORDED PRETAX LOSSES OF \$6,701,000 AND \$994,000, RESPECTIVELY, REPRESENTING ITS PROPORTIONATE SHARE OF THE LOSS FROM ITS EQUITY INVESTMENT IN FLIP CHIP TECHNOLOGIES, LLC ("FCT").

IN FISCAL 1998, THE COMPANY RECORDED A PRETAX LOSS OF \$8,715,000 REPRESENTING ITS PROPORTIONATE SHARE OF THE LOSS FROM ITS EQUITY INVESTMENT IN FCT. THE COMPANY ALSO INCURRED A ONE TIME RESIZING CHARGE OF \$8,420,000 FOR SEVERANCE AND ASSET WRITE-OFFS AND A CHARGE OF \$3,788,000 FOR INVENTORY RELATED ITEMS. SEE NOTE 2 TO THE COMPANY'S CONSOLIDATED FINANCIAL STATEMENTS FOR A DETAILED DISCUSSION.

IN FISCAL 1999 THE COMPANY RECORDED PRETAX LOSSES AS FOLLOWS: \$12,166,000 REPRESENTING ITS SHARE OF THE LOSS FROM FCT; \$5,918,000 FOR SEVERANCE AND ASSET WRITE-OFFS IN CONNECTION WITH THE MOVE OF IC BALL BONDER MANUFACTURING TO SINGAPORE AND RESIZING EFFORTS; \$3,935,000 OF IN-PROCESS R&D IN CONNECTION WITH THE PURCHASE OF THE X-LAM TECHNOLOGY; AND \$837,000 FOR ITS PROPORTIONATE SHARE OF THE LOSS FROM ADVANCED POLYMER SOLUTIONS.

(3) FISCAL YEARS 1997, 1996, AND 1995 RESTATED TO REFLECT REQUIREMENT OF SFAS 128.

PER SHARE PRICE OF COMMON STOCK

Traded on the NASDAQ National Market System, NASDAQ Symbol-KLIC

| Fiscal Year | 1999 | | 1998 | | 1997 | | 1996 | | 1995 | |
|-------------|--------|--------|----------|--------|--------|--------|--------|--------|----------|--------|
| | High | Low | High | Low | High | Low | High | Low | High | Low |
| 1st Quarter | 21 7/8 | 9 3/8 | 48 1/4 | 16 1/2 | 22 1/4 | 10 1/2 | 36 3/4 | 22 | 10 31/32 | 7 1/2 |
| 2nd Quarter | 35 1/4 | 17 5/8 | 29 5/8 | 16 1/4 | 30 | 18 3/4 | 25 1/2 | 15 1/8 | 14 7/8 | 9 1/8 |
| 3rd Quarter | 29 | 19 | 24 13/16 | 13 7/8 | 35 5/8 | 20 3/4 | 20 1/2 | 13 1/4 | 33 3/8 | 13 1/4 |
| 4th Quarter | 29 | 19 1/8 | 19 1/2 | 11 1/2 | 58 3/8 | 31 | 14 5/8 | 8 3/4 | 45 3/8 | 32 7/8 |

The Company has not paid dividends since the 3rd Quarter of 1985.
At December 1, 1999, there were 664 shareholders of record.

In addition to historical information, this report 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 Act of 1934 and are subject to the safe harbor provisions created by these statutes. See Item 1. "Business" 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 30, 1999 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.

TO OUR SHAREHOLDERS:

Every year I start writing this by first rereading last year's President's Letter. A year ago, I was trying to explain the reasons behind the dramatic retrenchment our industry was going through and how we were responding. This year, my task is much more pleasant; I get to tell you how well things are today, and what we're doing to take advantage of the current boom market. The stunning change in just twelve months underscores how dynamic – and volatile – the semiconductor business is. Nonetheless, there are at least a few constants in this business.

One is that the balance between supply and demand will swing first one way, then the other, but never quite settle into equilibrium.

Long time followers of K&S can certainly appreciate the volatility of the semiconductor cycle. Semiconductor unit volume has, for over a decade, exhibited remarkably constant growth in the 10% to 11% range, yet customers alternately binge on capacity then retreat from the capital equipment market. In this regard, 1999 was a transition year, with business accelerating through the year so that we concluded our fourth fiscal quarter with sales of \$153,375,000, or roughly double the fourth quarter of fiscal 1998 sales of \$76,176,000. Earnings for the fourth quarter of fiscal 1999 were \$7,352,000 or \$0.30 per share, as compared to a loss of (\$18,331,000) or (\$0.79) per share in 1998.

Sales for the full year were \$398,917,000 compared to sales of \$411,040,000 in fiscal 1998, with a net loss of (\$16,946,000) or (\$0.72) per share, compared to a net loss of (\$5,440,000) or (\$0.23) per share in 1998.

As our customers continue to shift from retrenchment to aggressive growth, the inevitable questions come regarding the expected duration of the cycle and just how good will things get before the next, inevitable, swing. Obviously, we won't really know until it has happened, but we believe there are a number of clues that suggest a longer and more robust cycle than normal.

One clue comes from the customers themselves. Most of our major customers are forecasting accelerated capital spending through the year 2000, and in many cases, have engaged us in purchase negotiations for large numbers of machines and increased shipments of materials. On the strength of those forecasts, we are continuing to increase our

own capacity in virtually every major product line. While we don't know just how high the top of the cycle will be, we are planning for fiscal 2000 sales to be well above the \$600,000,000 run rate reported in the September quarter.

Another clue about the cycle comes from an examination of past cycles. It appears to us that semiconductor cycles are usually (although not always) self-inflicted. The root cause seems to do with the lack of granularity in wafer fabrication capacity additions. Under most circumstances, it is impossible to add just a little bit of wafer fab capacity; typically if you are going to build a fab, you build a good sized one – a project that takes 2-3 years (including the time to ramp to full production) and costs in the neighborhood of \$1 billion dollars. Since you're stuck with the high fixed costs associated with this billion dollar investment, once you have it, you run it, which means you will also make the corresponding investments in back-end assembly – our end of the market. The problems arise when many companies, all in the same niche, all add wafer fab capacity simultaneously. That segment of the business will inevitably swing into a position of excess supply until the expected increases in semiconductor unit volume absorb the excess.

The good news here is that our customers have, at least by historic measures, been under investing in new wafer fabs. While this seems to be changing (judging from the accelerated bookings levels of wafer fab equipment companies such as Applied Materials, Lam, Novellus, and KLA/Tencor) given the 2 to 3 years required to build and ramp a new fab, we ought to have that long before our customers trigger the end of this cycle.

It is useful to strike a cautionary note at this point. The above analysis applies to the industry's supply and demand dynamic. One ought to keep in mind that there are also examples of externally triggered down cycles – the most recent occurring in late 1997 with the Asian financial meltdown which pushed the then-recovering semiconductor industry back into the downturn from which we have just emerged. For all the vigor of the semiconductor business, it is not immune to macro events.

Another one of the constants of the semiconductor industry has to do with technological progress. Today's leading edge products will be old hat next year. This is true whether it is at the chip level,

where you see a faster microprocessor coming out every month or two, or at the equipment level where the 8020 ball bonder we introduced last year is already giving way to its replacement, our model 8028. We continue to invest in new product development – including a successor to the 8028 which is already in testing – and continually evolving materials offerings developed in conjunction with our equipment products. Thus, we deliver total solutions to our customers, not just hardware.


There is an interesting corollary to the idea of continued product turnover: most product improvements happen through stretching seemingly mature technologies rather than replacing them wholesale. Again, this is true at the chip level where the shrinking of process technology allows a company like Intel to run their existing designs faster or at K&S where, for instance, the introduction of new gold alloys allows us to wire bond applications we didn't think we could tackle a year ago.

This is not to say that from time to time there aren't fundamental shifts in the way semiconductors are built, but those shifts inevitably take longer than the trade press would have you expect. In our end of the business, we are deeply involved in the projected shift from traditional chip and wire assembly with its emphasis on wire bonding, to flip chip and/or chip scale packaging techniques. We continue to invest in these next generation technologies because we believe that they will one day represent the center of gravity of semiconductor assembly. But we are also justifiably proud that we have been able to push off that transition because we have extended wire bonding capability specifically through the kind of short product life cycle and product management philosophies mentioned above. We think we are positioned to take advantage of ongoing semiconductor growth, regardless of the packaging technology choices our customers might make.

Perhaps the last constant exhibited by the semiconductor industry has to do with cost; ultimately it seems to go back to Moore's Law -- first articulated by the Intel founder, Gordon Moore -- which postulates that the industry will continue to grow in proportion to the extent that the cost of electronic functionality can be continually reduced. Not surprisingly, our customers expect us to do our part. So while we have been increasing the productivity of our ball bonders (which represent about half of our total revenue), by about 15% per product generation over the last six years or so, our average selling prices have gone up at a much slower rate. While our increases in market share over that

same time frame testify to the extent to which we have delivered customer satisfaction, we recognize that our cost structure has precluded us from delivering the kind of shareholder returns that we ought to. Accordingly, earlier this year we decided it was time to lower our manufacturing cost structure by shifting IC ball bonder production from America to Asia. When this move is complete next summer, we expect a noticeable reduction in manufacturing costs of our principal product line. Coupled with the volume leverage expected to accompany the growth spurt we are currently experiencing, it should result in a more acceptable margin structure.

Hopefully, a year from now I'll reread this as I prepare to write next year's President's Letter. Inevitably, since this is the semiconductor industry, we'll have had to dodge a curve ball or two, but I expect the major themes of this letter – growth, product innovation and improving profits – will be equally relevant.



C. Scott Kulicke
Chairman of the Board
Chief Executive Officer
December 17, 1999

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

FORM 10-K

(Mark one)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the fiscal year ended September 30, 1999

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the transition period from ____ to ____

Commission file number **0-121**

KULICKE AND SOFFA INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Pennsylvania

(State or other jurisdiction of
incorporation or organization)

2101 Blair Mill Road, Willow Grove, PA

(Address of principal executive offices)

23-1498399

(I.R.S. Employer
Identification No.)

19090

(zip code)

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

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

None

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

COMMON STOCK, WITHOUT PAR VALUE

(Title of Class)

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

The aggregate market value of the Registrant's common stock (its only voting stock) held by non-affiliates of the Registrant as of **December 1, 1999** was approximately **\$822,190,000**. (Reference is made to the final paragraph of Part II, Item 5 herein for a statement of assumptions upon which this calculation is based).

As of **December 1, 1999**, there were 23,568,851 shares of the Registrant's common stock, without par value, outstanding.

Documents Incorporated by Reference

Portions of the Registrant's Proxy Statement for the 2000 Annual Shareholders' Meeting to be filed prior to January 8, 2000 are incorporated by reference into Part III, Items 10, 11, 12 and 13 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.

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KULICKE AND SOFFA INDUSTRIES, INC.
1999 Annual Report on Form 10-K

Table of Contents

| | <u>Page</u> |
|---|-------------|
| Part I | |
| Item 1. Business | 2 |
| Item 2. Properties | 10 |
| Item 3. Legal Proceedings | 11 |
| Item 4. Submission of Matters to a Vote of Security Holders | 11 |
| Part II | |
| Item 5. Market for the Registrants' Common Equity and Related Stockholder Matters | 11 |
| Item 6. Selected Financial Data | 12 |
| Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations | 14 |
| Item 7A. Quantitative and Qualitative Disclosures About Market Risk | 28 |
| Item 8. Financial Statements and Supplementary Data | 28 |
| Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure | 64 |
| Part III | |
| Item 10. Directors and Executive Officers of the Registrant | 64 |
| Item 11. Executive Compensation | 64 |
| Item 12. Security Ownership of Certain Beneficial Owners and Management | 64 |
| Item 13. Certain Relationships and Related Transactions | 64 |
| Part IV | |
| Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K | 65 |

PART I

In addition to historical information, this report 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 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 that relate to our future revenue, product development, demand forecasts, competitiveness, gross margins, operating expenses, cost savings expected from the transfer of our automatic ball bonder manufacturing to Singapore and benefits expected as a result of:

- *The projected growth rates in the overall semiconductor industry, the semiconductor assembly equipment market and the market for semiconductor packaging materials;*
- *the anticipated development, production and licensing of our advanced packaging technology;*
- *the projected continuing demand for wire bonders; and*
- *the anticipated growing importance of the flip chip assembly process in high-end market segments.*

Generally words such as "may," "will," "should," "could," "anticipate," "expect," "intend," "estimate," "plan," "continue," and "believe," or the negative of or other variation on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this report. 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 and 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 under Item 1. Business and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Item 1. BUSINESS.

We design, manufacture and market capital equipment and packaging materials for sale to companies that manufacture and assemble semiconductor devices. We also service, maintain, repair and upgrade assembly equipment. Today, we are the world's largest supplier of semiconductor assembly equipment, according to VLSI Research, Inc. Our business is divided into three segments: equipment, packaging materials and advanced packaging technology.

Historically, the demand for semiconductors and our semiconductor assembly equipment has been volatile from period to period. A downturn in the semiconductor industry began in fiscal 1998 and continued through the first half of fiscal 1999, contributing to our net losses for fiscal years 1998 and 1999. The semiconductor industry began to rebound in the second half of 1999, and we reported strong fourth quarter results, with net sales of \$153.4 million and net income of \$7.4 million, compared to net sales of \$76.2 million and a net loss of \$18.3 million in the fourth quarter of 1998, and net sales of \$110.8 million and a net loss of \$0.7 million in the third quarter of 1999.

Kulicke and Soffa Industries, Inc. was incorporated in Pennsylvania in 1956. Our principal offices are located at 2101 Blair Mill Road, Willow Grove, Pennsylvania 19090 and our telephone number is (215) 784-6000.

Products and Services

We offer a broad range of semiconductor assembly equipment, packaging materials, advanced packaging technologies and complementary services and spare parts used in the semiconductor assembly process. Set forth below is a table listing the approximate percentage of our net sales by principal product for our fiscal years ended September 30, 1999, 1998 and 1997.

| | Fiscal Year Ended | | |
|---------------------------------|--------------------------|--------------------|--------------------|
| | September 30, | | |
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Wire bonders | 55% | 58% | 65% |
| Additional assembly equipment | 7 | 7 | 7 |
| Services and spare parts | 6 | 8 | 6 |
| Packaging materials | 31 | 27 | 22 |
| Advanced packaging technologies | <u>1</u> | <u>--</u> | <u>--</u> |
| | <u>100%</u> | <u>100%</u> | <u>100%</u> |

See Note 11 to our Consolidated Financial Statements for financial results by Business segment.

Wire Bonders

Our principal product line is our family of wire bonders, which are used to connect extremely fine wires, typically made of gold or aluminum, between the bonding pads on the die and the leads on the integrated circuit (IC) package to which the die has been bonded. We offer both ball and wedge bonders in automatic and manual configurations. Ball bonders typically are used for leadframe-based and laminate-based packages, while wedge bonders typically are used for ceramic packages. We believe that our wire bonders offer competitive advantages based on high productivity and superior process control, enabling fine pitch bonding and long, low wire loops, which are needed to assemble advanced IC packages. The selling prices for our automatic wire bonders range from \$60,000 to over \$200,000 and from \$8,000 to \$40,000 for manual wire bonders, in each case depending on system configuration and purchase volume.

Our current generation of wire bonders, the 8000 family, is based on an entirely new platform and required us to develop new software and many subassemblies that were not part of our prior series of wire bonders. The first products in the 8000 family were the Model 8020 ball bonder and Model 8060 wedge bonder. In the third quarter of fiscal 1999, we introduced the Model 8028 ball bonder and began to shift production capacity from the Model 8020 ball bonder. By the end of the fourth quarter of fiscal 1999, the Model 8028 accounted for the majority of ball bonders we sold due to its superior technical performance and productivity.

We continue to market the Model 8060 wedge bonder, which we introduced during the fiscal 1997 fourth quarter and began shipping in volume in the first quarter of fiscal 1998, the Model 8090, a large area wedge bonder we introduced during the first quarter of fiscal 1998 and the 4500 digital series of manual wire bonders. We also continue to develop a new wire bonder platform to meet expected customer requirements.

As part of our strategy to reduce the manufacturing costs of our wire bonders, we plan to transfer our automatic ball bonder manufacturing from Willow Grove, Pennsylvania to a 74,000 square foot facility in Singapore. We expect the Singapore facility to be fully operational in late fiscal 2000.

Additional Semiconductor Assembly Equipment

In addition to wire bonders, we produce and distribute other types of semiconductor assembly equipment, including wafer dicing saws and die bonders, flip chip assembly systems and factory automation and integration systems.

Dicing Saws. Dicing saws use diamond-embedded saw blades to cut silicon wafers into individual semiconductor die. We presently produce and market two dicing saws: the Model 7500, an automatic dicing saw, and the Model 7700 twin spindle dicing saw, which was introduced during the fourth quarter of fiscal 1999. These dicing saws range in price from \$150 to more than \$400.

Die Bonders. Die bonders are used to attach a semiconductor die to a leadframe or other package before wire bonding. We have a 5 year distribution agreement with DATACON Semiconductor Equipment GmbH, an Austrian company, principally to market their multi chip module and flip chip die bonder product line worldwide, excluding Europe. The die bonders range in price from \$200,000 to more than \$500,000, depending on configuration. In the fourth quarter of fiscal 1999, we began marketing the 2200 apm, an extremely accurate multi chip bonder developed by DATACON. We have received several orders for the 2200 apm.

Flip Chip Assembly Systems. Flip chip is an alternative assembly technique in which the die is inverted and attached to the package or board using conductive bumps, thereby eliminating the need for conventional die or wire bonding. The Model 2200 apm, manufactured by DATACON Semiconductor Equipment GmbH and distributed by us, can be configured to support flip chip applications. Selling prices for flip chip applications exceed \$300,000.

Factory Automation and Integration Systems. Factory systems include products and services designed to automate data collection and material flow between process steps in semiconductor assembly. We are successfully marketing the Knet, a PC-based information management system, as well as several software products for factory simulation and lot management.

We also offer different configurations of some of our products for non-semiconductor applications. For instance, our Model 980 saw can be configured for cutting and grinding hard and brittle materials, such as ceramic, glass and ferrite, that are used in the fabrication of chip capacitors or disk drive heads.

Packaging Materials

We offer a range of packaging materials to semiconductor device assemblers which we sell under the brand names "American Fine Wire," "Micro-Swiss," "Semitec" and "Advanced Polymer Solutions." We have integrated these operating units with our equipment groups, and intend to expand this business in an effort to increase our revenues from materials used in the assembly of ICs. We also sell our packaging materials for use with competitors' assembly equipment. Our principal packaging materials are:

Bonding Wire. American Fine Wire is a manufacturer of very fine (typically 0.001 inches in diameter) gold, aluminum and copper wire used in the wire bonding process. American Fine Wire produces wire to a wide range of specifications, which can satisfy most wire bonding applications.

Expendable Tools. The Micro-Swiss family of expendable tools includes capillaries, wedges, die collets, saw blades and microspheres. Capillaries and wedges are used to feed out, attach and cut the wires used in wire bonding. Die collets are used to pick up and place die into packages. Micro-Swiss brand hubless saw blades are used to cut hard and brittle materials. Semitec, which we acquired in October 1996, manufactures hub blades that are used to cut silicon wafers into semiconductor die.

Die Attach Adhesives. Advanced Polymer Solutions, a joint venture company that we established in the first quarter of fiscal 1999 with Polyset, Inc., currently offers two die attach adhesive formulations based on epoxy siloxane chemistry. The first is a fast curing adhesive that can eliminate the need for oven curing, reducing handling and processing time during the assembly of semiconductors. The second provides a high degree of moisture resistance for increased package reliability. Additional products planned for introduction in fiscal 2000 include flip chip underfills and liquid encapsulants.

Services and Spare Parts

We believe that our knowledge and experience have positioned us to deliver innovative, customer-specific services that reduce the cost of owning our equipment. Historically, our offerings in this area were limited to spare parts, customer training and extended warranty contracts. In response to customer trends in outsourcing packaging requirements, we are focusing on providing repair and maintenance services, a variety of equipment upgrades, machine and component rebuild activities and expanded customer training through a Value-Added Products and Services Organization. These services are generally priced on a time and materials basis. The service and maintenance arrangements are typically subject to bi-annual or multi-year contracts.

Investment in Advanced Packaging Technologies

In February 1996, we entered into a joint venture agreement with Delco Electronics Corporation to license flip chip technology and to provide wafer bumping services on a contract basis through Flip Chip Technologies, LLC. Flip Chip Technologies intends to focus primarily on licensing its flip chip technology to customers. As of September 30, 1999, Flip Chip Technologies had sold one license and we expect it to sell additional licenses in fiscal 2000. In addition, Flip Chip Technologies completed construction of its manufacturing facility in Phoenix, Arizona during fiscal 1997, has commenced production and currently is providing contract bump services to customers and is working with other customers to have its manufacturing processes qualified. In March of 1998, Flip Chip Technologies introduced a new wafer level chip scale package, named the Ultra CSPTM, aimed at the chip scale packaging market. A chip scale device has a surface area no larger than 1.2 times the area of the die. Flip Chip Technologies' Ultra CSP package has been qualified and is currently being shipped to customers.

On May 31, 1999, we increased our ownership interest in Flip Chip Technologies to 73.6% by converting all of our outstanding loans and accrued interest into equity units. Under various operating agreements, we manage Flip Chip Technologies jointly with Delco and have agreed not to compete with the joint venture. Flip Chip Technologies has also entered into various agreements with Delco that are customary in similar joint venture arrangements.

We continuously evaluate investments in advanced packaging technologies. To that end, in February 1999, we acquired the X-LAM technology of MicroModule Systems™, a Cupertino, California company, to enable production of high performance ball grid array substrates, daughter cards and multi-layer boards. In the fourth quarter of fiscal 1999, we leased a 35,000 square foot manufacturing/research and development facility in Milpitas, California and are building a staff to fully develop and market the technology.

To date our Advanced Packaging Technology business has experienced losses. We expect these losses to continue at least through fiscal 2000.

Customers

Our major customers include large semiconductor manufacturers and subcontract assemblers worldwide. Some of these major customers are:

| | |
|------------------------------------|----------------------------------|
| Advanced Micro Devices | Lucent Technologies |
| Advanced Semiconductor Engineering | Micron Technology |
| Amkor Technologies | Motorola |
| Anam | National Semiconductor |
| ChipPAC | Orient Semiconductor Electronics |
| Fujitsu | Philips Electronics |
| IBM | ST Microelectronics |
| Infineon Technologies | Siliconware Precision |
| Intel | Texas Instruments |

Sales to a relatively small number of customers have accounted for a significant percentage of our net sales. In fiscal 1999, no customer accounted for more than 10% of net sales, but in fiscal 1998 sales to Intel accounted for 17.6% of our net sales, and in fiscal 1997 sales to Anam accounted for 12.5% of our net sales and sales to Intel accounted for 10.2% of our net sales.

We believe that developing long-term relationships with our customers is critical to our success. By establishing these relationships with semiconductor manufacturers and subcontract assemblers, we gain insight into our customers' future IC packaging strategies. This information assists us in our efforts to develop material, equipment and process solutions that address our customers' future assembly requirements.

International Operations

We sell our products to semiconductor device manufacturers and contract manufacturers, which are primarily located in or have operations in the Asia/Pacific region. Approximately 83% of our fiscal 1999 net sales, 80% of our fiscal 1998 net sales and 85% of our fiscal 1997 net sales were for delivery to customer locations outside of the United States. The majority of these foreign sales were destined to customer locations in the Asia/Pacific region, including Taiwan, Korea, Malaysia, the Philippines, Singapore, Hong Kong and Japan. We expect sales outside of the United States to continue to represent a substantial portion of our future revenues.

In addition, we maintain manufacturing operations in countries other than the United States, including operations located in Israel, Singapore and Switzerland. Risks associated with our international operations include risks of foreign currency and foreign financial market fluctuations, international exchange restrictions, changing political conditions and monetary policies of foreign governments, war, civil disturbances, expropriation, or other events which may limit or disrupt markets.

Sales and Customer Support

We established a single sales management team in the third quarter of fiscal 1999 to coordinate activities and improve customer support. Our direct sales force, consisting of approximately 80 individuals at September 30, 1999, is responsible for the sale of all product lines, including those of our equipment, packaging materials and advanced packaging technology businesses, to customers in the United States and the Asia/Pacific region, including Japan. Lower volume product lines, as well as all equipment sales to customers in Europe, are sold through a network of manufacturers' representatives.

We believe that providing comprehensive worldwide sales, service, training and support are important competitive

factors in the semiconductor equipment industry, and we have combined these functions into a customer operations group. In order to support our U.S. and foreign customers whose semiconductor assembly operations are located in the Asia/Pacific region, we maintain a significant presence in the region, with sales facilities in Hong Kong, Japan, Korea, Taiwan, Malaysia, the Philippines and Singapore, a technology center in Japan and application labs in Singapore. We also maintain customer resource centers in Taiwan, the Philippines and Singapore. We support our assembly equipment customers worldwide with over 175 customer service and support personnel as of September 30, 1999, located in the United States, Hong Kong, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand. Our local presence in the Asia/Pacific countries enables us to provide more timely customer service and support by positioning our service representatives and spare parts near customer facilities, and affords customers the ability to place orders locally and to deal with service and support personnel who speak the customer's language and are familiar with local country practices.

Backlog

At September 30, 1999, our backlog of orders approximated \$93.0 million, compared to approximately \$54.0 million at September 30, 1998. Our backlog consists of product orders for which we have received confirmed purchase orders, and which are scheduled for shipment within 12 months. Virtually all orders are subject to cancellation, deferral or rescheduling by the customer with limited or no penalties. Because of the 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 revenues for any succeeding quarterly period.

Manufacturing

Equipment. Our assembly equipment manufacturing activities consist primarily of integrating components and subassemblies to create finished systems configured to customer specifications. During fiscal 1999, we performed system design, assembly and testing in-house at our Willow Grove, Pennsylvania and Haifa, Israel facilities, utilizing an outsourcing strategy for the manufacture of many of our major subassemblies. We believe that outsourcing enables us to minimize our fixed costs and capital expenditures and allows us to focus on product differentiation through system design and quality control. Our just-in-time inventory management strategy has reduced our manufacturing cycle times and limited our on-hand inventory. This strategy will continue at our new facility in Singapore, sourced largely by local suppliers. We have obtained ISO 9001 certification for operations in our Willow Grove, Pennsylvania facility and for our Haifa, Israel equipment manufacturing facility, and will apply for ISO 9001 certification of our new facility in Singapore.

Packaging Materials. We manufacture our Micro-Swiss expendable tools at our facility in Yokneam, Israel and our American Fine Wire product line, consisting of gold and aluminum bonding wire, at facilities in Selma, Alabama, Singapore and Thalwil, Switzerland. We manufacture our Semitec hub blades in Santa Clara, California. We manufacture our Advanced Polymer Solutions adhesives in our Willow Grove, Pennsylvania facility. All three American Fine Wire facilities, as well as the Semitec facility, have received ISO 9002 certification and the Micro-Swiss facility has received ISO 9001 certification.

Advanced Packaging Technology. We also maintain manufacturing facilities in Phoenix, Arizona for Flip Chip Technologies and in Milpitas, California for our X-LAM technology.

Research and Product Development

Because technological change occurs rapidly in the semiconductor industry, we devote substantial resources to our research and development programs to maintain our competitiveness. We employed approximately 380 individuals in research and development at September 30, 1999. We pursue the continuous improvement and enhancement of existing products while simultaneously developing next generation products. For example, while the performance of current generations of wire bonders is being enhanced in accordance with a specific continuous improvement plan, we are simultaneously developing the next generation wire bonders. Much of the next generation equipment we are presently developing is based on modular, interchangeable subsystems, including the 8000 control platform, which we believe will promote more efficient and cost-effective manufacturing operations, lower inventory levels, improved field service capabilities and shorter product development cycles, and allow us to introduce new products more quickly. In fiscal 1999, we introduced two new bonders based on technology developed for earlier models of the 8000 family, the Model 8028, an automatic ball bonder that offers increased accuracy and productivity over its predecessor, the Model 8020, and the Model 8098, which is used for large area ball bonding and wafer level ball bumping.

Our net expenditures for research and development totaled approximately \$37.2 million, \$48.7 million and \$46.0 million during the fiscal years ended September 30, 1999, 1998 and 1997, respectively. We have received funding from certain customers and government agencies pursuant to contracts or other arrangements for the performance of specified research and development activities. Such amounts are recognized as a reduction of research and development expense when specified activities have been performed. During the fiscal years ended September 30, 1999, 1998 and 1997, such funding totaled approximately \$1.3 million, \$1.7 million and \$2.0 million, respectively.

Competition

The semiconductor equipment and packaging materials industries are intensely competitive. Significant competitive factors in the semiconductor equipment market include performance, quality, customer support and price. Our major equipment competitors include:

- ASM Pacific Technology, Shinkawa, Kaijo and ESEC in wire bonders;
- ESEC, Nichiden, ASM Pacific Technology and Alphasem in die bonders; and
- Disco Corporation in dicing saws.

Competitive factors in the semiconductor packaging materials industry include price, delivery and quality. Our significant packaging materials competitors with respect to expendable tools and blades include:

- Gaiser Tool Co. and Small Precision Tools, Inc. in expendable tools; and
- Disco Corporation in blades;

and in the bonding wire market:

- Tanaka Electronic Industries and Sumitomo Metal Mining.

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 than we have. Some of these competitors are Japanese or Korean companies that have had and may continue to have an advantage over us in supplying products to local customers because many of these customers appear to prefer to purchase from local suppliers, without regard to other considerations.

We expect our competitors to improve their current products' performance, and to introduce new products with improved price and performance characteristics. New product introductions by our competitors or by new market entrants could hurt our sales. If a particular semiconductor manufacturer or subcontract assembler selects a competitor's product for a particular assembly operation, we may not be able to sell a product to that manufacturer or assembler for a significant period of time because manufacturers and assemblers sometimes develop lasting relations with suppliers, and products in our industry often go years without requiring replacement. In addition, we may have to lower our prices in response to price-cuts by our competitors, which could materially and adversely affect our business, financial condition and operating results. We cannot assure you that we will be able to continue to compete in these or other areas in the future.

Intellectual Property

Where circumstances warrant, we seek to obtain 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 United States patents some of which have foreign counterparts. We believe that the duration of our patents generally exceeds the life cycles of the technologies disclosed and claimed in the patents. Although the patents we hold and may obtain in the future may be of value, we believe that our success will depend primarily on our engineering, manufacturing, marketing and service skills.

In addition, we believe that much of our important technology resides in our proprietary software and trade secrets. As long as we rely on trade secrets and unpatented knowledge, including software, to maintain our competitive position, there is no assurance that competitors may not independently develop similar technologies and possibly obtain patents containing claims applicable to our products and processes. The sale of our products

covered by such patents could require licenses that may not be available on acceptable terms, or at all. In addition, although we execute non-disclosure and non-competition agreements with certain of our employees, customers, consultants, selected vendors and others, there is no assurance that such secrecy agreements will not be breached

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. These laws could impose liability even if we did not know of, or were not responsible for, the contamination.

We have in the past and will in the future incur costs to comply with environmental laws. We are not, however, currently aware of any 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. It is possible, however, that material environmental costs or liabilities may arise in the future.

Employees

At September 30, 1999, we had 2,239 permanent employees, 33 temporary employees and 145 contract personnel worldwide. Our only employees represented by a labor union are America Fine Wire's employees in Singapore. Most of the employees at our new automatic ball bonder manufacturing facility in Singapore will also be members of that union. Generally, we believe our employee relations to be good. Competition in the recruiting of personnel in the semiconductor and semiconductor equipment industry is intense, particularly with respect to software engineering. We believe that our future success will depend in part on our continued ability to hire and retain qualified management, marketing and technical employees.

Executive Officers of the Company

The following table sets forth certain information regarding the executive officers of the Company.

| <u>Name</u> | <u>Age</u> | <u>First Became an Officer (calendar year)</u> | <u>Position</u> |
|---------------------|------------|--|--|
| C. Scott Kulicke | 50 | 1976 | Chairman of the Board of Directors and Chief Executive Officer |
| Morton K. Perchick | 62 | 1982 | Executive Vice President |
| David A. Leonhardt | 41 | 1997 | Senior Vice President |
| Charles Salmons | 44 | 1992 | Senior Vice President |
| Clifford G. Sprague | 56 | 1989 | Senior Vice President and Chief Financial Officer |
| Walter Von Seggern | 59 | 1992 | Senior Vice President |
| Laurence P. Wagner | 39 | 1998 | Senior Vice President |

C. Scott Kulicke has been Chief Executive Officer since 1979 and Chairman of the Board since 1984. Prior to that he held a number of executive positions with us. Mr. Kulicke is the son of Frederick W. Kulicke, Jr., a member of the Board of Directors. Mr. Kulicke also serves on the Board of Directors of General Semiconductor, Inc.

Morton K. Perchick joined us in 1980 and has served in various executive positions, most recently as Senior Vice President, prior to being appointed Executive Vice President in July 1995.

David A. Leonhardt joined us in 1982 as an engineer in wedge bonder development and was promoted to various positions in engineering, product management and new product development. In 1997 he was appointed Vice President of Strategic Marketing and then Vice President of the Ball Bonder Division and in March 1998 was named Vice President and General Manager, Sales and Marketing, for the Equipment Group. Mr. Leonhardt was promoted to his current position of Senior Vice President, as co-head of our equipment and materials businesses, in September 1999.

Charles Salmons joined us in 1978 as an accountant and was promoted to various positions in accounting, production and operations. In 1992 he was appointed Vice President Manufacturing, in 1994 he was appointed Vice President Operations, in 1996 he was appointed Vice President Product Development Programs and in March 1998 was named Vice President and General Manager, Operations, for the Equipment Group. Mr. Salmons was promoted to his current position of Senior Vice President Customer Operations in September 1999.

Clifford G. Sprague joined us in March 1989 as Vice President and Chief Financial Officer and was promoted to Senior Vice President in 1990. Prior to joining us, he served for more than five years as Vice President and Controller of the Oilfield Equipment Group of NL Industries, Inc., an oilfield equipment and service company.

Walter E. Von Seggern joined us in September 1992 as Vice President of Engineering and Technology. He was appointed Senior Vice President in December 1996, and was in charge of Marketing from April 1997 until early 1998 when he was placed in charge of new equipment business opportunities. Mr. Von Seggern has also served as President of Advanced Polymer Solutions LLC, a joint venture of ours, since December 1998. From April 1988 to April 1992, he worked for M/A-Com, Inc. He was General Manager of M/A-Com's ANZAC, RGH and Eurotec Divisions from 1990 to 1992, and from 1988 to 1990 he was General Manager of M/A-Com's Radar Products Division.

Laurence P. Wagner joined us in July 1998 as Senior Vice President and President of Packaging Materials and is currently serving as Senior Vice President, as co-head of our equipment and materials businesses. From March 1996 until the time he joined us, Mr. Wagner was Vice President and General Manager of Emcore Electronic Materials, a compound semiconductor materials manufacturer. Before Emcore, Mr. Wagner was the Operating Unit Manager of Shipley Company LLC, a division of Rohm and Haas Company, where he had worked since 1989.

Item 2. PROPERTIES.

Our major facilities are described in the table below:

| <u>Facility</u> | <u>Approximate Size</u> | <u>Function</u> | <u>Products Manufactured</u> | <u>Lease Expiration Date</u> |
|----------------------------|-------------------------|---|---|------------------------------|
| Willow Grove, Pennsylvania | 214,000 sq.ft. (1) | Corp. headquarters, manufacturing, technology center, sales and service | Wire bonders | N/A |
| Singapore | 73,700 sq.ft. (2) | Manufacturing, technology center, sales and service | Wire bonders | September 2002 |
| Haifa, Israel | 46,100 sq.ft. (2) | Manufacturing, technology center, assembly systems | Manual wire bonders, dicing saws and automatic multi-process assembly systems | April 2002 |
| Yokneam, Israel | 48,400 sq.ft. (1) | Manufacturing, Micro-Swiss operations | Capillaries, wedges and die collets | N/A |
| Yokneam, Israel | 12,000 sq.ft. (2) | Manufacturing, Micro-Swiss operations | Hard material blades | April 2003 |
| Milpitas, California | 35,000 sq.ft. (2) | Technology center | Laminate substrates | July 2006 |
| Phoenix, Arizona | 45,000 sq.ft. (2) | Technology center, Manufacturing | Wafer bumping services | April 2006 |
| Tokyo, Japan | 10,700 sq.ft. (2) | Technology center, sales and service | N/A | (3) |
| Singapore | 35,100 sq.ft. (2) | Manufacturing, American Fine Wire operations | Bonding wire | May 2000 |
| Selma, Alabama | 25,600 sq.ft. (2) | Manufacturing, American Fine Wire operations | Bonding wire | October 2017 |
| Thalwil, Switzerland | 15,100 sq.ft. (2) | Manufacturing, American Fine Wire operations | Bonding wire | (3) |
| Santa Clara, California | 13,600 sq.ft. (2) | Manufacturing | Dicing saw blades | October 2003 |

(1) Owned.

(2) Leased.

(3) Cancellable semi-annually upon six months notice.

We also rent space for sales and service offices in Horsham, Pennsylvania; Santa Clara, California; Mesa, Arizona; Korea; Taiwan; Malaysia; the Philippines; Singapore; and Hong Kong. We believe that our facilities generally are in good condition.

Item 3. LEGAL PROCEEDINGS.

From time to time, we are a plaintiff or defendant in various cases arising out of our usual and customary business. We cannot assure you of the results of pending or future litigation, but we do not believe that resolution of these matters will materially and adversely affect our business, financial condition or operating results.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

None.

PART II

Item 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Our common stock is traded on the Nasdaq National Market under the symbol "KLIC." The following table lists the high and low per share sale prices for our common stock for the periods indicated:

| | <u>High</u> | <u>Low</u> |
|----------------|-------------|------------|
| Fiscal 1998: | | |
| First Quarter | \$48 1/4 | \$16 1/2 |
| Second Quarter | 29 5/8 | 16 1/4 |
| Third Quarter | 24 13/16 | 13 7/8 |
| Fourth Quarter | 19 1/2 | 11 1/2 |
| Fiscal 1999: | | |
| First Quarter | 21 7/8 | 9 3/8 |
| Second Quarter | 35 1/4 | 17 5/8 |
| Third Quarter | 29 | 19 |
| Fourth Quarter | 29 | 19 1/8 |

On December 1, 1999, there were 664 holders of record of the shares of outstanding common stock.

The payment of dividends on our common stock is within the discretion of our board of directors. We do not currently pay cash dividends on our common stock and we do not expect to declare cash dividends on our common stock in the near future. We intend to retain earnings to finance the growth of our business. Our Gold Supply Agreement between American Fine Wire and its subsidiaries and their gold supplier contains certain financial covenants and prohibits American Fine Wire from paying any dividends or making any distributions without the consent of the supplier if, following the payment of the dividend or distribution, the net worth of American Fine Wire is less than \$7.0 million.

During fiscal 1999, we contributed 24,461 shares of unregistered common stock, valued at its fair market value, as our matching contribution to our employee 401(k) Plan. Registration of such shares was not required because the transaction did not constitute a "sale" under Section 2(3) of the Securities Act of 1933 or the transaction was exempt pursuant to the private offering provisions of that Act.

For the purposes of calculating the aggregate market value of the shares of our common stock held by nonaffiliates, as shown on the cover page of this report, we have assumed that all the outstanding shares were held by nonaffiliates except for the 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 that there are not other persons who may be deemed to be affiliates of the Company. Further information concerning shareholdings of executive officers, directors and principal shareholders is included in our proxy statement relating to our 2000 Annual Meeting of Shareholders filed or to be filed with the Securities and Exchange Commission.

Item 6. SELECTED FINANCIAL DATA.

The following selected consolidated financial data should be read in conjunction with our consolidated financial statements, related notes and other financial information included elsewhere herein.

| | Fiscal Years Ended September 30, | | | | |
|--|--|-------------------|------------------|------------------|------------------|
| | 1999 | 1998 | 1997 | 1996(1) | 1995 |
| | (in thousands, except per share amounts) | | | | |
| Statement of Operations Data: | | | | | |
| Net sales: | | | | | |
| Equipment | \$269,854 | \$302,107 | \$391,721 | \$287,234 | \$283,835 |
| Packaging materials | 124,450 | 108,933 | 110,186 | 93,942 | 20,674 |
| Advanced packaging technology | 4,613 | -- | -- | -- | -- |
| Total net sales | <u>398,917</u> | <u>411,040</u> | <u>501,907</u> | <u>381,176</u> | <u>304,509</u> |
| Cost of goods sold: | | | | | |
| Equipment | 188,958 | 191,948 | 228,854 | 163,844 | 155,195 |
| Packaging materials | 90,326 | 82,259 | 89,148 | 75,270 | 12,262 |
| Advanced packaging technology | 6,098 | -- | -- | -- | -- |
| Total cost of goods sold | <u>285,382</u> | <u>274,207</u> | <u>318,002</u> | <u>239,114</u> | <u>167,457</u> |
| Operating expenses: | | | | | |
| Equipment | 92,157 | 107,083 | 97,143 | 102,515 | 71,880 |
| Packaging materials | 23,500 | 24,553 | 21,029 | 14,563 | 3,278 |
| Advanced packaging technology | 5,314 | -- | -- | -- | -- |
| Corporate (2) | 12,296 | 9,353 | 8,070 | 7,566 | 6,454 |
| Total operating expenses (3) | <u>133,267</u> | <u>140,989</u> | <u>126,242</u> | <u>124,644</u> | <u>81,612</u> |
| Income (loss) from operations: | | | | | |
| Equipment | (11,261) | 3,076 | 65,724 | 20,875 | 56,760 |
| Packaging materials | 10,624 | 2,121 | 9 | 4,109 | 5,134 |
| Advanced packaging technology | (6,799) | -- | -- | -- | -- |
| Corporate (2) | (12,296) | (9,353) | (8,070) | (7,566) | (6,454) |
| Total income (loss) from operations | <u>(19,732)</u> | <u>(4,156)</u> | <u>57,663</u> | <u>17,418</u> | <u>55,440</u> |
| Interest, net | 3,547 | 5,514 | 820 | (164) | 173 |
| Equity in loss of joint ventures (4) | (10,000) | (8,715) | (6,701) | (994) | -- |
| Other expenses | -- | -- | -- | (630) | -- |
| Income (loss) before taxes | (26,185) | (7,357) | 51,782 | 15,630 | 55,613 |
| Provision (benefit) for income taxes | (8,221) | (1,917) | 13,463 | 3,783 | 12,791 |
| Minority interest | 1,018 | -- | -- | -- | - |
| Net income (loss) | <u>\$ (16,946)</u> | <u>\$ (5,440)</u> | <u>\$ 38,319</u> | <u>\$ 11,847</u> | <u>\$ 42,822</u> |
| Basic net income (loss) per common share (5) | <u>\$ (0.72)</u> | <u>\$ (0.23)</u> | <u>\$ 1.84</u> | <u>\$ 0.61</u> | <u>\$ 2.44</u> |
| Diluted net income (loss) per common share (5) | <u>\$ (0.72)</u> | <u>\$ (0.23)</u> | <u>\$ 1.79</u> | <u>\$ 0.60</u> | <u>\$ 2.23</u> |
| Shares used in per common share calculations:(5) | | | | | |
| Basic | 23,423 | 23,301 | 20,871 | 19,375 | 17,563 |
| Diluted | 23,423 | 23,301 | 21,428 | 19,788 | 19,590 |

| | As of September 30, | | | | |
|---|----------------------------|-------------|-------------|-------------|-------------|
| | 1999 | 1998 | 1997 | 1996 | 1995 |
| | (in thousands) | | | | |
| Balance Sheet Data: | | | | | |
| Cash, cash equivalents and short-term investments (7) | \$ 39,345 | \$106,900 | \$115,587 | \$ 58,422 | \$38,214 |
| Working capital | 167,131 | 182,181 | 190,220 | 113,804 | 103,909 |
| Total assets | 378,145 | 342,584 | 376,819 | 249,554 | 191,029 |
| Long-term debt (6) (7) | -- | -- | 220 | 50,712 | 156 |
| Shareholders' equity | 274,776 | 287,910 | 291,927 | 147,489 | 133,647 |

- (1) The fiscal 1996 Consolidated Statement of Operations was reclassified for comparative purposes. Also, in October 1995, we acquired American Fine Wire Corporation through the acquisition of all of the common stock of Circle "S" Industries, Inc., the parent corporation of American Fine Wire. American Fine Wire is a manufacturer of fine gold and aluminum wire used in the wire bonding process.
- (2) In January 1999, we purchased the X-LAM technology and fixed assets used in the design, development and manufacture of laminate substrates for \$8.0 million. As a result of this purchase, we recorded a pre-tax charge of approximately \$3.9 million for the writeoff of in-process research and development.
- (3) During fiscal 1999, we announced plans to relocate our automatic ball bonder manufacturing to Singapore. As a result, we recorded a pre-tax charge for severance of approximately \$4.0 million for the elimination of approximately 230 positions and asset writeoff costs of approximately \$1.6 million. In fiscal 1999, we also recorded approximately \$0.4 million for severance related to the reduction in workforce begun in fiscal 1998. During fiscal 1998, we recorded a pre-tax charge of approximately \$8.4 million for severance and product discontinuance as a result of a slowdown in the semiconductor industry. Of this amount \$6.0 million was associated with the equipment business, \$1.7 million with the packaging materials business and \$0.7 million was recorded in corporate expense. During fiscal 1996, we recorded a pre-tax charge in the equipment business of approximately \$3.0 million for severance and the writeoff of costs incurred in connection with the suspended Willow Grove facility expansion as a result of a slowdown in the semiconductor industry.
- (4) Effective May 31, 1999 we increased our ownership interest in Flip Chip Technologies, LLC, from 51.0% to 73.6% by converting all of our outstanding loans to Flip Chip Technologies and accrued interest totaling \$32.8 million into equity units. We accounted for the increase in ownership by the purchase method of accounting and began consolidating the results of Flip Chip Technologies into our financial statements on June 1, 1999. We recognized pre-tax losses of approximately \$12.2 million, \$8.7 million, \$6.7 million and \$1.0 million, representing our share of the losses from our investment in Flip Chip Technologies during fiscal 1999, 1998, 1997 and 1996, respectively. Our financial statements for fiscal 1999 reflect pre-tax losses at Flip Chip Technologies of \$3.0 million for the four months after we began reporting Flip Chip Technologies on a consolidated basis and a loss of \$9.2 million for the eight months when Flip Chip Technologies was accounted for by the equity method of accounting and reflected in Equity in Loss of Joint Ventures.
- (5) Because we had a net loss for each of the fiscal years ended September 30, 1999 and 1998, only the common shares outstanding have been used to calculate both the basic earnings per common share and diluted earnings per common share for these years because the inclusion of the potential common shares would be anti-dilutive.
- (6) Does not include letters of credit or foreign exchange contract obligations.
- (7) In May 1997, we completed the sale of 3,450,000 shares of our common stock in an underwritten offering, resulting in net proceeds of approximately \$101 million. A portion of these proceeds was used to repay the \$50 million outstanding balance under the Company's existing bank revolving credit facility.

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

In addition to historical information, this report 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 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 that relate to our future revenue, product development, demand forecasts, competitiveness, gross margins, operating expenses, cost savings expected from the transfer of our automatic ball bonder manufacturing to Singapore and benefits expected as a result of:

- *The projected growth rates in the overall semiconductor industry, the semiconductor assembly equipment market and the market for semiconductor packaging materials;*
- *the anticipated development, production and licensing of our advanced packaging technology;*
- *the projected continuing demand for wire bonders; and*
- *the anticipated growing importance of the flip chip assembly process in high-end market segments.*

Generally words such as "may," "will," "should," "could," "anticipate," "expect," "intend," "estimate," "plan," "continue," and "believe," or the negative of or other variation on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this report. 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 and 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 under Item 1. Business and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview

We design, manufacture and market capital equipment and packaging materials for sale to companies that manufacture and assemble semiconductor devices. We also service, maintain, repair and upgrade assembly equipment. Today, we are the world's largest supplier of semiconductor assembly equipment, according to VLSI Research Inc. We sell our products to semiconductor device manufacturers and contract manufacturers, which are primarily located in or have operations in the Asia/Pacific region. Sales to customers outside of the United States accounted for 83% of net sales for fiscal 1999 and are expected to continue to represent a substantial portion of our future revenues. To support our international sales, we currently have major manufacturing operations in the United States, Israel and Singapore, sales facilities in Hong Kong, Japan, Korea, Taiwan, Malaysia, the Philippines and Singapore, a technology center in Japan and applications labs in Singapore. We also maintain customer resource centers in Taiwan, the Philippines and Singapore.

Our business is divided into the following three segments:

Equipment

Through our equipment business we design, manufacture and market semiconductor assembly equipment. Our principal product line is our family of wire bonders, which are used to connect extremely fine wires, typically made of gold or aluminum, between the bonding pads on the die and the leads on the IC package to which the die has been bonded. We are the world's largest manufacturer of wire bonders, according to VLSI. In fiscal 1999, we successfully introduced the Model 8028 automatic ball bonder which, by the fourth quarter, accounted for the majority of ball bonders we sold due to its superior technical performance and productivity.

Earlier in 1999, we announced plans to relocate our automatic ball bonder manufacturing from the United States to Singapore. We expect the new manufacturing operation in Singapore to be fully operational in late fiscal 2000. Automatic ball bonders are our primary product and accounted for 48.0% of our total sales in fiscal 1999. We anticipate cost savings as a result of this move from reductions in the cost of shipping, labor and production materials. In addition, we expect to receive favorable tax treatment from Singapore in connection with the move. We incurred start up costs associated with the move of \$1.6 million in fiscal 1999 and expect additional start up costs in the first half of fiscal 2000 of approximately \$6.8 million.

Packaging Materials

Through our packaging materials business we design, manufacture and market a range of packaging materials to semiconductor device assemblers including very fine (typically 0.001 inches in diameter) gold, aluminum and copper wire, capillaries, wedges, die collets and saw blades. We expect to expand this business in an effort to increase our revenues from materials used in the assembly of ICs.

Advanced Packaging Technology

We established this business segment in fiscal 1999 to reflect the operating results of our strategic initiative to develop new technologies for advanced semiconductor packaging. This new business unit is comprised of Flip Chip Technologies, LLC, a joint venture with Delco Electronics Corporation, and our X-LAM business unit.

Through Flip Chip Technologies we license our flip chip technology and provide wafer bumping services. On May 31, 1999, we increased our ownership interest in Flip Chip Technologies from 51.0% to 73.6% by converting all of our outstanding loans and accrued interest, which totaled \$32.8 million, into equity units. We accounted for the increase in ownership by the purchase method of accounting and began consolidating the results of Flip Chip Technologies into our financial statements on June 1, 1999. For the first eight months of fiscal 1999, we recognized 100% of Flip Chip Technologies' pre-tax loss and did not recognize interest income on loans to Flip Chip Technologies due to the existence of these loans and uncertainties about Flip Chip Technologies' ability to obtain additional financing from Delco and its ability to generate short-term positive cash flow. The pre-tax loss of Flip Chip Technologies for fiscal 1999 was \$14.6 million compared to \$17.1 million in fiscal 1998. Our share of the Flip Chip Technologies pre-tax loss, reflected in our financial statements, was \$12.2 million in fiscal 1999 and \$8.7 million in fiscal 1998. The \$12.2 million pre-tax loss in fiscal 1999 consists of \$3.0 million of losses for the four months after we began reporting Flip Chip Technologies on a consolidated basis (after giving effect to Delco's minority interest and the elimination of inter-company interest), and a loss of \$9.2 million for the eight months when Flip Chip Technologies was accounted for by the equity method of accounting and reflected in Equity in Loss of Joint Ventures.

We established our X-LAM business unit to develop, manufacture and market high density interconnect substrates using either flip chip or advanced wire bonding interconnection schemes. We purchased the X-LAM technology for \$8.0 million in the second quarter of fiscal 1999, have leased a research/manufacturing facility and are building a staff to fully develop and market the technology. In fiscal 1999, we recorded an operating loss for the X-LAM business of \$3.0 million and a charge for the writeoff of in-process research and development of \$3.9 million.

Neither Flip Chip Technologies nor X-LAM has been profitable to date. With a full year of X-LAM operations in fiscal 2000 and our anticipated increased selling, general and administrative expenses and development spending, we expect losses at X-LAM to increase in fiscal 2000. We do not expect our X-LAM operations to generate any sales until fiscal 2001.

The following table sets forth the percentage of our net sales from each business segment for the past three years:

| <u>Segment</u> | <u>Fiscal Year Ended</u> | | |
|-------------------------------|--------------------------|-------------|-------------|
| | <u>September 30,</u> | | |
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Equipment | 68% | 73% | 78% |
| Packaging Materials | 31 | 27 | 22 |
| Advanced Packaging Technology | <u>1</u> | <u>--</u> | <u>--</u> |
| Total | <u>100%</u> | <u>100%</u> | <u>100%</u> |

Net sales. We recognize net sales upon the shipment of products or performance of services.

Our equipment sales depend on the capital expenditures of semiconductor manufacturers and subcontract assemblers worldwide which, in turn, depend on the current and anticipated market demand for semiconductors and products using semiconductors. The semiconductor industry historically has been highly volatile and has experienced periodic downturns and slowdowns which have had a severe negative effect on the semiconductor industry's demand for capital equipment. These downturns and slowdowns, coupled with the effect of the Asian economic crisis, adversely affected our sales during the latter half of fiscal 1998 and the first half of fiscal 1999. However, the semiconductor business cycle appears to have turned up, as evidenced by our sales results in the

fourth quarter of fiscal 1999.

Our packaging materials sales depend on the same semiconductor manufacturers and subcontract assemblers as our equipment sales. However, the volatility in demand for our packaging materials is less than that of our equipment sales due to the consumable nature of the packaging materials. We expect to expand this portion of our business to help offset the volatility of the equipment segment, and because the worldwide market for consumable packaging materials is larger than the market for our semiconductor assembly equipment.

Our advanced packaging technology sales represent the sales from Flip Chip Technologies for the four months that we reported the results of Flip Chip Technologies on a consolidated basis. We will report Flip Chip Technologies' sales on a consolidated basis in all twelve months of fiscal 2000. Therefore, we expect our advanced packaging technology sales to be higher than in fiscal 1999.

Cost of goods sold. Our equipment cost of goods sold consists mainly of subassemblies, materials, direct and indirect labor costs and other overhead. We rely on subcontractors to manufacture many of the components and subassemblies for our products and we rely on sole source suppliers for some material components.

Packaging materials cost of goods sold consists primarily of gold, aluminum, direct labor and other materials used in the manufacture of bonding wire, capillaries, wedges and other company products, with gold making up the majority of the cost. Gold bonding wire is generally priced based on a fabrication charge per 1,000 feet of wire, plus the value of the gold. To minimize our exposure to gold price fluctuations, we obtain gold for fabrication under a contract with our gold supplier and only purchase the gold when we ship and sell the finished product to the customer. Accordingly, fluctuations in the price of gold are generally absorbed by our gold supplier or passed on to our customers. Since gold makes up a significant portion of the cost of goods sold by the packaging materials segment, the gross profit margins will be lower than can be expected in the equipment business.

Cost of goods sold in our Advanced Packaging Technology segment is currently comprised of material, labor and overhead at Flip Chip Technologies. Our X-LAM operations will not report cost of goods sold until they begin to generate revenues, which is expected to occur in fiscal 2001.

Selling, general and administrative expense. Our selling, general and administrative expense is comprised primarily of personnel costs, professional costs, management information systems, facility and depreciation expenses. We expect our selling, general and administrative expenses to increase in fiscal 2000 as we build the staff in the X-LAM operation, report the results of Flip Chip Technologies on a consolidated basis for a full year and incur additional start up costs in Singapore.

Research and development expense. Our research and development costs consist primarily of labor, prototype material and other costs associated with our developmental efforts to strengthen our product lines and develop new products. Our research and development costs decreased in fiscal 1999 due to the reduction of our workforce in response to the market downturn. We expect our research and development costs to increase in fiscal 2000 as the semiconductor business cycle improves, we devote a full year to building the X-LAM operation and we report the results of Flip Chip Technologies on a consolidated basis for a full year.

Results of Operations

The table below shows principal line items from our historical consolidated statements of operations, as a percentage of our net sales, for the three years ended September 30, 1999:

| | Fiscal Year Ended | | |
|---|--------------------------|--------------------|--------------------|
| | September 30, | | |
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Net sales | 100.0% | 100.0% | 100.0% |
| Costs of goods sold | <u>71.5</u> | <u>66.7</u> | <u>63.3</u> |
| Gross margin | 28.5 | 33.3 | 36.7 |
| Selling general and administrative | 21.6 | 20.4 | 16.0 |
| Research and development, net | 9.3 | 11.9 | 9.2 |
| Resizing costs | 1.5 | 2.0 | -- |
| Purchased in-process research and development | <u>1.0</u> | <u>--</u> | <u>--</u> |
| Income (loss) from operations | <u>(4.9)%</u> | <u>(1.0)%</u> | <u>11.5%</u> |

Fiscal Years Ended September 30, 1999 and September 30, 1998

During the 1999 fiscal year ended September 30, 1999, we recorded bookings of \$438.0 million compared to \$347.0 million during fiscal 1998. The \$91.0 million increase in fiscal 1999 bookings occurred in the second half of fiscal 1999 and primarily reflected a significant improvement in demand for semiconductor assembly equipment. At September 30, 1999, total backlog of customer orders approximated \$93.0 million compared to \$54.0 million at September 30, 1998. Since the timing of deliveries may vary and orders are generally subject to cancellation, our backlog as of any date may not be indicative of net sales for any succeeding period.

Net sales for the 1999 fiscal year decreased by \$12.1 million to \$398.9 million from \$411.0 million in fiscal 1998. During the first half of fiscal 1999, net sales totaled \$134.7 million, or \$108.5 million lower than the same six month period of fiscal 1998, reflecting the impact of the slowdown in the semiconductor industry which started in 1998. However, as the semiconductor business cycle turned up in the second half of fiscal 1999, net sales increased over the prior year in the third and fourth quarters by 20.8% and 101.3%, respectively. Net sales in our equipment segment decreased by \$32.3 million to \$269.9 million in fiscal 1999 compared to \$302.1 million in fiscal 1998. The lower equipment segment sales were primarily due to significantly reduced demand for wedge bonders. We sold 117 wedge bonders in fiscal 1999, a 71% or \$48.1 million decline from the fiscal 1998 level. This was partially offset by higher automatic ball bonder sales (approximately 2,000 machines sold in fiscal 1999 versus approximately 1,800 machines sold in fiscal 1998). The increase in ball bonder sales primarily occurred in the second half of fiscal 1999, reflecting the increased industry demand for semiconductor assembly equipment as well as the introduction of the new Model 8028 ball bonder. The lower equipment segment sales in fiscal 1999 also reflect reduced average selling prices for our Model 1488 and Model 8020 ball bonders partially offset by improved pricing for the Model 8028. Packaging materials segment net sales increased \$15.6 million to \$124.5 million in fiscal 1999 from \$108.9 million in fiscal 1998. The higher packaging material segment net sales were due primarily to a higher volume of gold wire and capillary shipments during the second half of fiscal 1999. Net sales of our new advanced packaging technology segment reflect the sales of Flip Chip Technologies for the four months ended September 30, 1999.

International sales (shipments of our products with ultimate foreign destinations) comprised 83% and 80% of our total sales during fiscal 1999 and 1998, respectively. Sales to customers in the Asia/Pacific region, including Korea, Taiwan, Malaysia, the Philippines, Japan, Singapore, Thailand and Hong Kong, accounted for approximately 74% and 73% of our total sales in fiscal 1999 and 1998, respectively. During fiscal 1999, shipments to customers located in Taiwan, Singapore, the Philippines and Malaysia accounted for approximately 23%, 11%, 11% and 10% of net sales, compared to 20%, 5%, 17% and 16%, respectively, for the 1998 fiscal year.

Gross profit decreased to \$113.5 million for fiscal 1999 from \$136.8 million in fiscal 1998 due primarily to the lower volume of equipment segment sales in fiscal 1999. Gross profit margin decreased to 28.5% in fiscal 1999 from 33.3% in fiscal 1998, due to lower gross profit margin in the equipment segment partially offset by higher gross profit margin in the packaging materials segment. The gross profit margin in fiscal 1999 was also negatively impacted by a \$1.5 million negative gross profit recorded by our newly created advanced packaging technology segment. The equipment segment gross profit margin decreased to 30.0% in fiscal 1999 from 36.5% in fiscal 1998 due primarily to the lower average selling price for the segment's Model 1488 and 8020 ball bonders due to pricing competition and higher manufacturing costs associated with the Model 8020 and a sharp decline in sales of our higher margin wedge bonder. The packaging materials segment gross profit margin increased to 27.4% in fiscal 1999 from 24.5% in fiscal 1998 due primarily to operating efficiencies resulting from the impact of cost improvement programs implemented in fiscal 1998, the favorable impact of higher unit volumes of materials and higher margins on fine pitch products.

Selling, general and administrative expenses increased to \$86.2 million in fiscal 1999 from \$83.9 million in fiscal 1998. The \$2.3 million increase was due to \$3.8 million of expenses associated with our new advanced packaging technology business units and \$1.6 million of start up expenses for our new Singapore manufacturing facility, partially offset by lower selling, general and administrative expenses in our equipment segment. The lower selling, general and administrative expenses in our equipment segment were due to lower payroll and related costs resulting from our resizing efforts to reduce our workforce in late fiscal 1998 and early fiscal 1999.

Research and development costs decreased to \$37.2 million in fiscal 1999 from \$48.7 million in the prior fiscal year. Our lower research and development expense was due to lower payroll and related costs resulting from our efforts to reduce our workforce in late fiscal 1998 and early fiscal 1999. We focused our research and development

efforts on new product introductions (e.g., the Model 8028 ball bonder) and new product development. Gross research and development expenditures were partially offset by funding received from customers and governmental subsidies totaling \$1.3 million in fiscal 1999 compared to \$1.7 million in fiscal 1998.

We recorded resizing costs of \$5.9 million in fiscal 1999 reflecting provisions for severance and asset writeoff costs resulting from the announced move of our automatic ball bonder manufacturing to Singapore and additional severance in connection with the reduction in our workforce. At September 30, 1999, we had accrued liabilities of \$4.0 million in connection with these severance costs, the majority of which will be paid in fiscal 2000. We also recorded resizing costs of \$8.4 million in fiscal 1998 for severance, asset writeoffs and other costs in response to the industry-wide slowdown in orders for semiconductor assembly equipment and to a lesser extent semiconductor packaging materials.

In January 1999, we purchased the X-LAM technology and fixed assets used in the design, development and manufacture of laminate substrates for \$8.0 million. In fiscal 1999, we recorded a charge of approximately \$3.9 million for in-process research and development representing the appraised value of products still in the development stage that had not reached technological feasibility and an operating loss of \$3.0 million.

Loss from operations in fiscal 1999 was \$19.7 million compared to a loss of \$4.2 million in fiscal 1998. The unfavorable variance in fiscal 1999 was due primarily to an operating loss at our equipment business of \$11.3 million compared to operating income of \$3.1 million in the prior year and a loss at our new advanced packaging technology business of \$6.8 million. The operating loss in our equipment business was due to lower net sales and gross profit margin and one-time charges for the move to Singapore and workforce reductions. The operating losses in our equipment and advanced packaging technology businesses were partially offset by an increase of \$8.5 million in operating income in the packaging materials business. Additionally, as described previously, we recorded a \$3.9 million writeoff of in-process research and development relating to the acquisition of the X-LAM technology.

Interest income, net of interest expense, decreased by \$2.0 million in fiscal 1999 compared to fiscal 1998, primarily due to lower short-term investments resulting from the use of cash throughout fiscal 1999 to fund the net loss, working capital, capital expenditures and investments in new business initiatives. See "Liquidity and Capital Resources."

Equity in Loss of Joint Ventures increased from \$8.7 million in fiscal 1998 to \$10.0 million in fiscal 1999. Our share of the pre-tax loss in Flip Chip Technologies for the eight months ended May 31, 1999 was \$9.2 million versus \$8.7 million for all of 1998. In fiscal 1999 we recognized 100% of the loss at Flip Chip Technologies for the eight months ended May 31, 1999 compared to recognizing only 51.0% of the Flip Chip Technologies loss in fiscal 1998, for reasons previously discussed. During fiscal 1999, we also recognized a \$0.8 million loss from our 50% equity interest in Advanced Polymer Solutions, LLC, a joint venture established in fiscal 1999 to develop, manufacture and market advanced polymer materials for semiconductor and microelectronic packaging end users.

We recorded a tax benefit of \$8.2 million in fiscal 1999. The effective tax rate of this benefit was 33%. We increased our valuation allowance on foreign tax credit carryforwards, and continue to maintain a valuation allowance for deferred tax assets related to the acquired domestic American Fine Wire net operating loss and net operating loss carryforwards of our Japanese subsidiary, because we cannot reasonably forecast sufficient future earnings by these subsidiaries to fully utilize the net operating losses during the carryforward period. If we realize the benefits of the American Fine Wire acquired net operating loss carryforward, the benefits would reduce the recorded amount of American Fine Wire goodwill. We believe that all of the net operating loss benefits generated during the year will be realized in the foreseeable future.

We recorded a minority interest in the net loss of Flip Chip Technologies of \$1.0 million. The minority interest reflects the portion (26.4%) of Flip Chip Technologies that is owned by Delco, our joint venture partner.

Our net loss for fiscal 1999 was \$16.9 million compared to a net loss of \$5.4 million in fiscal 1998, for the reasons enumerated above.

Fiscal Years Ended September 30, 1998 and September 30, 1997

During the 1998 fiscal year ended September 30, 1998, we recorded bookings totaling \$347.0 million compared to \$550.0 million during fiscal 1997. The \$203.0 million decrease in fiscal 1998 bookings primarily reflected an

industry-wide slowdown in orders for semiconductor assembly equipment. At September 30, 1998, total backlog of customer orders approximated \$54.0 million compared to \$118.0 million at September 30, 1997.

Net sales for the 1998 fiscal year decreased by \$90.9 million to \$411.0 million from \$501.9 million in fiscal 1997. The lower sales volume generally reflected the slowdown in the semiconductor industry, resulting in reduced demand for semiconductor assembly equipment and to a lesser extent packaging materials. The majority of the reduction in net sales was in our equipment segment where net sales decreased \$89.6 million to \$302.1 million in fiscal 1998 from \$391.7 million in fiscal 1997. Fewer unit sales of ball bonders (approximately 1,800 ball bonders were sold in fiscal 1998 compared to over 3,000 in fiscal 1997) were partially offset by higher unit sales of wedge bonders resulting in the lower equipment segment sales in fiscal 1998. Packaging materials segment net sales decreased \$1.3 million to \$108.9 million in fiscal 1998 from \$110.2 million in fiscal 1997. The lower packaging material segment net sales was due primarily to lower average selling prices of bonding wire as the result of lower prevailing gold prices in fiscal 1998 compared to fiscal 1997.

International sales (shipments of our products with ultimate foreign destinations) comprised 80% and 85% of our total sales during fiscal 1998 and 1997, respectively. Sales to customers in the Asia/Pacific region, including Korea, Taiwan, Malaysia, the Philippines, Japan, Singapore, Thailand and Hong Kong, accounted for approximately 73% and 76% of our total sales in fiscal 1998 and 1997, respectively. During fiscal 1998, shipments to customers located in Taiwan, the Philippines, Malaysia and Korea accounted for approximately 20%, 17%, 16% and 4% of net sales, compared to 22%, 8%, 13% and 19%, respectively, for the 1997 fiscal year. The most significant change in foreign destination sales occurred in Korea, where Korean based customers, which have historically accounted for a significant percentage of our sales, were adversely affected by the financial turmoil in that country and as a result, reduced their orders from us.

Gross profit decreased to \$136.8 million for fiscal 1998 from \$183.9 million in fiscal 1997 due primarily to the lower unit volume of equipment segment sales in fiscal 1998. Gross profit as a percentage of net sales decreased to 33.3% in fiscal 1998 compared to 36.6% in fiscal 1997, due to lower gross profit margin in the equipment segment partially offset by higher gross profit margin in the packaging materials segment. The equipment segment gross profit margin decreased to 36.5% in fiscal 1998 from 41.6% in fiscal 1997 due primarily to the lower unit volume, which resulted in the absorption of manufacturing overhead costs by fewer units. Our packaging materials segment gross profit margin increased to 24.5% in fiscal 1998 compared to 19.1% in fiscal 1997 due primarily to improved manufacturing efficiencies at our bonding wire and saw blade facilities.

Selling, general and administrative expenses increased to \$83.9 million in fiscal 1998 from \$80.2 million in fiscal 1997. This increase of \$3.7 million consisted of approximately \$3.1 million related to the equipment segment, \$0.4 million related to the packaging materials segment and \$0.2 million of incremental corporate costs. The increase in the equipment segment selling, general and administrative expenses was due primarily to increased selling, marketing and customer support costs associated with the launch of our new Model 8020 and 8060 wire bonders and increased spending in connection with the 1999 implementation of our new Enterprise Resource Planning System, which replaced the segment's business and accounting systems. The slight increase in the packaging materials selling, general and administrative expenses costs in fiscal 1998 was due to higher sales and distribution infrastructure costs.

Research and development costs increased to \$48.7 million in fiscal 1998 from \$46.0 million in the prior fiscal year. The majority of the research and development costs incurred were in the equipment segment and were due to increased internal labor, higher outside contract development costs and increased expenditures for prototype materials as we continued development of additional products in the 8000 family of wire bonders. We also continued to invest in new technologies, which may eventually lead to improved and alternative semiconductor assembly technologies. Gross research and development expenditures were partially offset by funding received from customers and governmental subsidies totaling \$1.7 million in fiscal 1998 compared to \$2.0 million in fiscal 1997.

We recorded resizing costs of \$8.4 million in the fourth quarter of fiscal 1998 reflecting our efforts to reduce our workforce and discontinue products in response to the industry-wide slowdown in orders for semiconductor assembly equipment and, to a lesser extent, semiconductor packaging materials. The resizing costs consisted of \$5.0 million of severance, \$2.8 million of asset writeoffs associated with discontinued products and \$0.6 million of other liabilities associated with the resizing. At September 30, 1998, we had accrued liabilities of \$3.7 million in connection with the resizing charges, the majority of which were paid in fiscal 1999.

Loss from operations in fiscal 1998 was \$4.2 million compared to operating income of \$57.7 million in fiscal 1997. The unfavorable variance to fiscal 1997 was due primarily to lower unit sales volume and gross profit in our equipment segment and to resizing charges, both resulting from the slowdown in the semiconductor industry. Partially offsetting the lower operating income in the equipment segment was a \$3.8 million improvement in operating income in our packaging materials segment, excluding resizing charges.

Interest income, net of interest expense, increased by \$4.7 million in fiscal 1998 compared to fiscal 1997, primarily due to the investment of net proceeds from our May 1997 public offering of common stock for a full year in fiscal 1998, compared to a partial year in fiscal 1997, and to the paydown of all outstanding bank debt with a portion of the proceeds of the public offering in May 1997.

During fiscal 1998, we recognized an \$8.7 million pre-tax loss from our 51% equity interest in Flip Chip Technologies compared to a pre-tax loss of \$6.7 million in fiscal 1997. The increase in the loss in fiscal 1998 resulted from delays in potential customers' evaluations of Flip Chip Technologies' manufacturing process and the generally soft business environment in the semiconductor industry, along with a ramp-up of Flip Chip Technologies' production facility.

We recorded a tax benefit of \$1.9 million in fiscal 1998. The effective tax rate of this benefit was 26%, resulting from U.S. pre-tax losses exceeding foreign pre-tax income that was taxed at lower rates.

Our net loss for fiscal 1998 was \$5.4 million compared to net income of \$38.3 million in fiscal 1997, for the reasons enumerated above.

Quarterly Results of Operations

The table below shows our quarterly net sales, gross profit and operating income (loss) by quarter for fiscal 1999 and 1998:

| | <u>Fiscal 1999</u> | <u>First Quarter</u> | <u>Second Quarter</u> | <u>Third Quarter</u> | <u>Fourth Quarter</u> | <u>Total</u> |
|-------------------------------|--------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------|
| Net sales | | \$61,175 | \$73,561 | \$110,806 | \$153,375 | \$398,917 |
| Gross profit | | 16,176 | 21,025 | 30,374 | 45,960 | 113,535 |
| Income (loss) from operations | | (10,282) | (17,087) | (776) | 8,413 | (19,732) |
| | | | | | | |
| | <u>Fiscal 1998</u> | <u>First Quarter</u> | <u>Second Quarter</u> | <u>Third Quarter</u> | <u>Fourth Quarter</u> | <u>Total</u> |
| Net sales | | \$123,111 | \$120,060 | \$ 91,693 | \$ 76,176 | \$411,040 |
| Gross profit | | 45,345 | 45,987 | 30,185 | 15,316 | 136,833 |
| Income (loss) from operations | | 10,630 | 12,987 | (3,202) | (24,571) | (4,156) |

The effect of the semiconductor industry downturn on our operating results is reflected in the quarterly results throughout fiscal 1998 and the first half of fiscal 1999. The turnaround in the industry cycle is reflected in the second half of fiscal 1999.

Effect of Recent Accounting Pronouncements

In June 1998, Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133") was issued. SFAS 133 establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. This Statement is effective for all fiscal quarters for financial statements for fiscal years commencing after June 15, 2000. We do not believe that the adoption of SFAS 133 will have a material impact on our financial statements.

Liquidity and Capital Resources

As of September 30, 1999, our cash, cash equivalents and investments totaled \$39.3 million compared to \$106.9 million at September 30, 1998. Additionally, we have a \$60.0 million bank revolving credit facility, which expires in March 2003. Borrowings are subject to our compliance with financial and other covenants set forth in the revolving credit documents. At September 30, 1999, we were in compliance with the covenants of the credit facility and had no cash borrowings outstanding under that facility, but had utilized \$1.0 million of availability under the credit facility to support letters of credit issued as security deposits for our new manufacturing facility in Singapore and our new X-LAM facility. The revolving credit facility provides for borrowings denominated in either U.S. dollars or foreign currencies. Borrowings in U.S. dollars bear interest either at a Base Rate (defined as the greater of the prime rate minus 1/4% or the federal funds rate plus 1/2%) or, at a LIBOR Rate (defined as LIBOR plus 0.4% to 0.8%, depending on our leverage ratio). Foreign currency borrowings bear interest at a LIBOR Rate, as defined above, applicable to the foreign currency.

On December 13, 1999, we issued \$150.0 million of convertible subordinated notes. On December 15, 1999 we issued an additional \$25.0 million of convertible subordinated notes in connection with the exercise of the initial purchasers' over-allotment option. The notes are general obligations of our company and subordinated to all senior debt. The notes bear interest at 4 3/4%, are convertible into our common stock at \$45.7993 per share and mature on December 15, 2006. There are no financial covenants associated with the notes and there are no restrictions on paying dividends, incurring additional debt or issuing or repurchasing our securities. Interest on the notes will be paid on June 15 and December 15 of each year beginning June 15, 2000. We may redeem the notes in whole or in part at any time after December 18, 2002 at prices ranging from 102.714% at December 19, 2002 to 100.0% at December 15, 2006.

Cash used in operating activities totaled \$37.9 million during fiscal 1999 compared to cash generated by operating activities of \$21.7 million during fiscal 1998 and \$42.0 million in fiscal 1997. The use of cash from operating activities was primarily the result of the net loss we recorded in fiscal 1999 and the increase in accounts receivable and inventory, partially offset by a significant increase in accounts payable, due to the ramp up in business in the fourth quarter.

At September 30, 1999, our working capital was \$167.1 million compared to \$182.2 million at September 30, 1998. Our lower working capital was due primarily to a \$67.6 million reduction in cash and short term investments and an increase in accounts payable, partially offset by higher accounts receivable and inventory. The higher non-cash working capital assets were the result of the ramp up in business in the fourth quarter of fiscal 1999.

During fiscal 1999, we invested approximately \$10.9 million in property and equipment, primarily for leasehold improvements and tooling for our new Singapore facility and our advanced packaging technology business, an increase in capacity for the packaging and materials business and an upgrade of our computer hardware and software systems in connection with the implementation of a new Enterprise Resource Planning System that became operational in fiscal 1999. We presently expect fiscal 2000 capital spending to more than double as we continue investing in the projects listed above.

During fiscal 1999, we loaned \$10.5 million to Flip Chip Technologies, then, as mentioned above, converted all outstanding loans and interest (including the \$10.5 million invested in fiscal 1999) into equity units of Flip Chip Technologies, thereby increasing our ownership interest in Flip Chip Technologies to 73.6% from 51.0%.

In September 1998, we entered into a joint venture agreement to develop, manufacture and market advanced polymer materials for semiconductor and microelectronic packaging end users. Through September 30, 1999, we have invested \$3.8 million in this joint venture and have committed to invest an additional \$2.2 million.

We purchased the X-LAM technology for \$8.0 million in the second quarter of fiscal 1999. Through September 30, 1999, we have invested an additional \$4.0 million for operational and capital expenditures, and we expect additional funding requirements will be necessary in future years.

The Israeli government has funded a portion of the research and development costs related to some of our products. We are contingently liable to repay this funding through royalties to the Israeli government. Royalty payments are due only after sale of the funded products, are computed at varying rates from 2% to 5% of the sales and are

limited to the amounts received from the Israeli government. At September 30, 1999, we estimate that contingent liabilities for royalties related to potential future product sales are less than \$3.0 million.

We believe that anticipated cash flows from operations, the proceeds from the sale of \$175.0 million of the 4 3/4% convertible subordinated notes described above, our working capital and amounts available under our revolving credit facilities will be sufficient to meet our liquidity and capital requirements for at least the next 12 months. However, we may seek, as required, equity or debt financing to provide capital for corporate purposes and/or to fund strategic business opportunities, including possible acquisitions, joint ventures, alliances or other business arrangements that could require substantial capital outlays. We cannot determine the timing and amount of these potential capital requirements at this time because they will depend on a number of factors, including demand for our products, semiconductor and semiconductor capital equipment industry conditions and competitive factors and the nature and size of strategic business opportunities that we may elect to pursue.

Risks Related to Our Business

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. Although these fluctuations are partly due to the volatile nature of the semiconductor industry, they also reflect the impact of other factors, some of which are outside of our control.

Some of the factors that could cause our revenues and/or operating margins to fluctuate significantly from period to period are:

- the mix of products that we sell because, for example:
 - packaging materials generally have lower margins than assembly equipment,
 - some lines of equipment are more profitable than others, and
 - some sales arrangements have higher margins than others;
- the volume and timing of orders for our products and any order postponements and cancellations by our customers;
- adverse changes in our pricing, or that of our competitors;
- higher than anticipated costs of development or production of new equipment models;
- the availability and cost of key components for our products;
- market acceptance of our new products and upgraded versions of our products;
- our announcement of, or perception by others that we will introduce, new or upgraded products, which could delay customers from purchasing our products;
- the timing of acquisitions; and
- our competitors' introduction of new products.

Many of our expenses, such as research and development and selling, general and administrative expenses, do not vary directly with our net sales. As a result, a decline in our net sales would adversely affect our operating results. In addition, if we were to incur additional expenses in a quarter in which we did not experience comparable increased net sales, our operating results would decline. Factors that could cause our expenses to fluctuate from period to period include:

- the timing and extent of our research and development efforts;
- severance and other costs of relocating facilities or resizings in market downturns; and
- inventory writeoffs due to obsolescence.

Because our revenues and operating results are volatile and difficult to predict, we believe that period-to-period comparisons of our operating results are not a good indication of our future performance.

The semiconductor industry as a whole is volatile, as are our financial results

Our operating results are significantly affected by the capital expenditures of semiconductor manufacturers and assemblers worldwide. Expenditures by semiconductor manufacturers and assemblers depend on the current and anticipated market demand for semiconductors and products that use semiconductors, such as personal computers, telecommunications, consumer electronics and automotive goods. Any significant downturn in the market for semiconductor devices or in general economic conditions would likely reduce demand for our products and adversely affect our business, financial condition and operating results.

Historically, the semiconductor industry has been volatile with sharp periodic downturns and slowdowns. These downturns have been characterized by, among other things, diminished product demand, excess production capacity and accelerated erosion of selling prices. This has severely and negatively affected the industry's demand for capital equipment, including the assembly equipment that we manufacture and market and, to a lesser extent, the packaging materials that we sell. These downturns and slowdowns have adversely affected our operating results. In the 1998 downturn, for example, our net sales declined from approximately \$501.9 million in fiscal 1997 to \$411.0 million in fiscal 1998 and continued to decline in the first half of fiscal 1999. Downturns in the future could similarly adversely affect our business, financial condition and operating results.

We are in the process of transferring our automatic ball bonder manufacturing to Singapore, which could disrupt our ability to supply our customers and may not result in the cost savings we anticipate

The proposed move of our automatic ball bonder manufacturing to Singapore will require us to relocate equipment, hire and train production, engineering and management personnel, qualify suppliers and develop a purchasing and delivery infrastructure. In addition, we expect to experience increased selling, general and administrative expenses in fiscal 2000 in connection with start up costs. We plan to source a significantly higher percentage of materials from suppliers in Singapore. To the extent we experience availability, reliability or quality problems as a result of this shift in supply source, our business would be adversely affected. In addition, we do not intend to move our research and development function from Willow Grove to the Singapore facility. If we are unable to accomplish the move efficiently and commence full production as scheduled, our ability to fill orders could be hurt, which could damage our relationships with customers. In addition, our ability to meet production requirements may be adversely affected by any problems associated with the start up of this facility. We also anticipate cost savings from the transfer of our automatic ball bonder manufacturing as a result of reduced costs of labor, shipping and materials. However, we cannot assure you that we will realize these savings.

Our business depends on attracting and retaining management, marketing and technical employees who are in great demand

As is the case with all technology companies, our future success depends on our ability to hire and retain qualified management, marketing and technical employees. Competition is intense in personnel recruiting in the semiconductor and semiconductor equipment industries, particularly with respect to some engineering disciplines. In particular, we have experienced periodic shortages of software engineers. If we are unable to continue to attract and retain the technical and managerial personnel we require, our business, financial condition and operating results could be adversely affected.

We may not be able to rapidly develop and manufacture new and enhanced products required to maintain or expand our business

We believe that our continued success will depend on our ability to continuously develop and manufacture or acquire new products and product enhancements on a timely and cost-effective basis. We also must introduce these products and product enhancements into the market in response to customers' demands for higher performance assembly equipment. Our competitors may develop enhancements to or future generations of competitive products that will offer superior performance, features and lower prices that may render our products noncompetitive. We may not be able to develop and introduce products incorporating new technologies in a timely manner or at a price that will satisfy future customers' needs or achieve market acceptance. For example, the introduction of the Model 8020 wire bonder in 1998 was less successful than we had hoped because of higher than anticipated design and

production costs and lower than anticipated sales prices.

We may not be able to accurately forecast demand for our product lines

We typically operate our business with a relatively short backlog and order supplies and otherwise plan production based on internal forecasts of demand. Due to these factors, we have in the past, and may again in the future, fail to accurately forecast demand, in terms of both volume and configuration for either our current or next-generation wire bonders. This has led to and may in the future lead to delays in product shipments or, alternatively, an increased risk of inventory obsolescence. For example, we inaccurately forecasted demand for the Model 8020 wire bonder in 1998 and consequently recorded writeoffs for excess inventory. Also, we underestimated the magnitude of the improvement in the semiconductor industry at the end of fiscal 1999 and the demand for the new Model 8028 ball bonder; as a result some customer shipments may be delayed in fiscal 2000.

If we fail to accurately forecast demand for our products, our business, financial condition and operating results could be materially and adversely affected.

Advanced packaging technologies other than wire bonding may render some of our products obsolete and our strategy for pursuing these other technologies may be costly and ineffective

Advanced packaging technologies have emerged that may improve device performance or reduce the size of an integrated circuit or IC package, as compared to traditional die and wire bonding. These technologies include flip chip, chip scale packaging and tape automated bonding. In general, these advanced technologies eliminate the need for wires to establish the electrical connection between a die and its package. For some assemblies, these advanced technologies have largely replaced wire bonding. However, today most ICs still employ die and wire bonding technology, and the possible extent, rate and timing of change is difficult, if not impossible, to predict. In fact, wire bonding has proved more durable than we originally anticipated, largely because of its reliability and cost. However, we cannot assure you that the semiconductor industry will not, in the future, shift a significant part of its volume into advanced packaging technologies, such as those discussed above. Presently, Intel, Motorola, IBM and Advanced Micro Devices, for example, have developed flip chip technologies for internal use, and a number of other companies are also increasing their investments in advanced packaging technologies. If a significant shift to advanced technologies were to occur, demand for our wire bonders and related packaging materials would diminish.

One component of our strategy is to develop the capacity to use advanced technologies to allow us to compete in those portions of the market that currently use these advanced technologies and to prepare for any eventual decline in the use of wire bonding technology. There are a number of risks associated with our strategy to diversify into new technologies:

- The technologies that we have invested in represent only some of the advanced technologies that may one day supercede wire bonding;
- Other companies are developing similar or alternative advanced technologies;
- Wire bonding may continue as the dominant technology for longer than we anticipate;
- The cost of developing advanced technologies may be significantly greater than we expect; and
- We may not be able to develop the necessary technical, research, managerial and other related skills to develop, produce, market and support these advanced technologies.

As a result of these risks, we cannot assure you that any of our attempts to develop alternative technologies will be profitable or that we will be able to realize the benefits that we anticipate from them.

Because we have a small number of products, a decline in demand for, or the price of, any of our products could cause our revenues to decline significantly

Historically, our wire bonders have comprised at least 55% of our net sales. If demand for, or pricing of, our wire bonders declines because our competitors introduce superior or lower cost systems, the semiconductor industry changes or because of other occurrences beyond our control, our business, financial condition and operating results

would be materially and adversely affected.

Because a small number of customers account for nearly all our sales, our revenues could decline if we lose any significant customer

The semiconductor manufacturing industry is highly concentrated, with a relatively small number of large semiconductor manufacturers and subcontract assemblers purchasing a substantial portion of semiconductor assembly equipment and packaging materials. Sales to our five largest customers accounted for approximately 45.2% of our fiscal 1997 net sales, 41.4% of our fiscal 1998 net sales and 31.7% of our fiscal 1999 net sales. In fiscal 1997, our sales to Anam accounted for 12.5% of our net sales, and sales to Intel accounted for 10.2% of our net sales. In fiscal 1998, sales to Intel accounted for 17.6% of our net sales. During fiscal 1999, no customer accounted for more than 10% of our net sales.

We expect that sales of our products to a limited number of customers will continue to account for a high percentage of our net sales for the foreseeable future. If we lose orders from a significant customer, or if a significant customer reduces its orders substantially, these losses or reductions will adversely affect our business, financial condition and operating results.

We depend on a small number of suppliers for materials and, if our suppliers do not deliver their products to us, we may be unable to deliver our products to our customers

Our products are complex and require materials, components and subassemblies of an exceptionally high degree of reliability, accuracy and performance. We rely on subcontractors to manufacture many of the components and subassemblies for our products and we rely on sole source suppliers for some material components. Our reliance involves a number of significant risks, including:

- loss of control over the manufacturing process;
- changes in our manufacturing processes, dictated by changes in the market, that have delayed our shipments;
- our inadvertent use of defective or contaminated materials;
- the relatively small operations and limited manufacturing resources of some of our contractors and suppliers, which may limit their ability to manufacture and sell subassemblies, components or parts in the volumes we require and at quality levels and prices we can accept;
- reliability and quality problems we experience with certain key subassemblies provided by single source suppliers; and
- delays in the delivery of subassemblies, which, in turn, have caused delays in some of our shipments.

If we are unable to deliver products to our customers on time for these or any other reasons, or if we do not maintain acceptable product quality or reliability in the future, our business, financial condition and operating results would be materially and adversely affected.

We are expanding and diversifying our operations, and if we fail to manage our expanding and more diverse operations successfully, our business and financial results may be materially and adversely affected

In recent years, we have broadened our product offerings to include significantly more packaging materials. Although our strategy is to diversify our products and services, we may not be able to develop, acquire, introduce or market new products in a timely or cost-effective manner and the market may not accept any new or improved products we develop, acquire, introduce or market.

Our diversification into new lines of business and our expansion through acquisitions and alliances has increased, and is expected to continue to increase, demand on our management, financial resources and information and internal control systems. Our success depends in significant part on our ability to manage and integrate acquisitions, joint ventures and other alliances and to continue to implement, improve and expand our systems, procedures and controls. If we fail to do this at a pace consistent with the development of our business, our business, financial condition and operating results would be materially and adversely affected.

As we seek to expand our operations, we expect to encounter a number of risks, which will include:

- risks associated with hiring additional management and other critical personnel;
- risks associated with adding equipment and capacity; and
- risks associated with increasing the scope, geographic diversity and complexity of our operations.

In addition, sales and servicing of packaging materials and advanced technologies require different organizational and managerial skills than sales of traditional wire bonding technology. We cannot assure you that we will be able to develop the necessary skills to successfully produce and market these different products.

We sell most of our products to customers located outside of the U.S. and we have substantial manufacturing operations located outside of the U.S., both of which subject us to risks from changes in trade regulations, currency fluctuations, political instability and war

Approximately 85% of our net sales for fiscal 1997, 80% of our net sales for fiscal 1998 and 83% of our net sales for fiscal 1999 were attributable to sales to customers for delivery outside of the United States. We expect our sales outside of the United States to continue to represent a substantial portion of our future revenues. Our future performance will depend, in significant part, on our ability to continue to compete in foreign markets, particularly in Asia. Asian economies have been highly volatile, resulting in significant fluctuation in local currencies, and political and economic instability. These conditions may continue or worsen, which could materially and adversely affect our business, financial condition and operating results. In addition, we rely on non-U.S. suppliers for materials and components used in the equipment that we sell. We also maintain substantial manufacturing operations in countries other than the United States, including operations in Israel and Singapore. As a result, a major portion of our business is subject to the risks associated with international commerce such as, risks of war and civil disturbances or other events that may limit or disrupt markets; expropriation of our foreign assets; longer payment cycles in foreign markets; international exchange restrictions; the difficulties of staffing and managing dispersed international operations; tariff and currency fluctuations; changing political conditions; foreign governments' monetary policies; and less protective foreign intellectual property laws.

Because most of our foreign sales are denominated in United States dollars, an increase in value of the United States dollar against foreign currencies, particularly the Japanese yen, will make our products more expensive than those offered by some of our foreign competitors. Our ability to compete overseas in the future could be materially and adversely affected by a strengthening of the United States dollar against foreign currencies.

The ability of our international operations to prosper also will depend, in part, on a continuation of current trade relations between the United States and foreign countries in which our customers operate and in which our subcontractors have assembly operations. A change toward more protectionist trade legislation in either the United States or foreign countries in which we do business, such as a change in the current tariff structures, export compliance or other trade policies, could adversely affect our ability to sell our products in foreign markets.

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 agreements) in our agreements with employees, vendors, consultants and customers and on the common law of trade secrets and proprietary "know-how." We secondarily rely, in some cases, on patent and copyright protection, which may become more important to us as we expand our investment in advanced packaging technologies. We may not be successful in protecting our technology for a number of reasons, including:

- Our competitors may independently develop technology that is similar to or better than ours;
- Employees, vendors, consultants and customers may not abide by their contractual agreements, and the cost of enforcing those agreements may be prohibitive, or those agreements may prove to 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; patents or copyrights may be challenged, invalidated or circumvented; and we may otherwise be unable to obtain adequate protection for our technology.

In addition, our partners in joint ventures and alliances may also have rights to technology we develop through those joint ventures and alliances. If we are unable to protect our technology, we could weaken our competitive position or face significant expense to protect or enforce our intellectual property rights.

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. As a result, industry participants often develop products and features similar to those introduced by others, increasing the risk that their products and processes may give rise to claims that 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 infringe 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 our products or processes to avoid infringing the rights of others may be costly or impractical.

Occasionally, third parties assert that we are, or may be, infringing on or misappropriating their intellectual property rights. In these cases, we will 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.

Some of our customers have received notices of infringement from the Lemelson Medical, Education and Research Foundation Limited Partnership (the "Lemelson Foundation"), alleging that equipment we have supplied to our customers, and processes this equipment performs, infringes on patents held by the Lemelson Foundation. These notices increased substantially in 1998, the year in which the Lemelson Foundation settled its suit against the Ford Motor Company, and entered into license agreements with Ford, GM and Chrysler. Since the settlement, a number of our customers, including Intel, have been sued by the Lemelson Foundation.

Some of our customers have requested that we defend and indemnify them against the Lemelson Foundation's claims or contribute to any settlement the customer reaches with the Lemelson Foundation. We have received opinions from our outside patent counsel with respect to various Lemelson Foundation patents. We are not aware that any equipment we market or that any process performed by our equipment infringes on the Lemelson Foundation patents and we do not believe that the Lemelson Foundation matter or any other pending intellectual property claim against us will materially and adversely affect our business, financial condition or operating results. The ultimate outcome of any infringement or misappropriation claim affecting us is uncertain, however, and we cannot assure you that our resolution of this litigation will not materially and adversely affect our business, financial condition and operating results.

Other Risks

Year 2000

If our products or our internal data management, accounting, manufacturing or operating software and systems do not adequately or accurately process or manage day or date information beyond the year 1999, our operations could be affected adversely. To address the issue, we created an internal task force to assess our state of readiness for possible "Year 2000" issues and to take the necessary actions to ensure our Year 2000 compliance. The taskforce has evaluated and continues to evaluate:

- our products and our internal business systems and software; and
- our vulnerability to possible Year 2000 exposure due to suppliers' and other third parties' lack of preparedness for the year 2000.

To evaluate equipment that we sell and equipment, tools or software that we use, we employed Year 2000 Readiness Test scenarios established by SEMATECH, an industry group comprised of U.S. semiconductor manufacturers. Based on this assessment, we do not believe the operation of the equipment that we sell or the equipment, tools and software that we use will be affected by the transition to the year 2000. We completed our review, material corrective measures and contingency planning in September 1999.

In connection with our review and corrective measures, we replaced the business and accounting systems of our U.S. and Israeli equipment manufacturing sites with a new Enterprise Resource Planning System that was represented to us to be Year 2000 compliant. We spent approximately \$9.8 million in hardware, software, consulting costs and internal expenses to implement this new system.

In addition, we have been in contact with our suppliers and other third parties to determine the extent to which they may be vulnerable to Year 2000 issues. We have received representations as to the Year 2000 compliance of our major suppliers.

We believe that the reasonably anticipated worst case scenario for our business resulting from Year 2000 problems would be unexpected delays of supplier deliveries and customer shipments. If these delays are significant, customers may cancel orders and long-term customer relationships could be damaged. We believe that we have developed appropriate contingency plans for any Year 2000 delays, including carrying larger inventory of products from a small number of suppliers that we believe may be vulnerable to year 2000 disruptions.

Anti-takeover provisions in our Articles of Incorporation and Bylaws and Pennsylvania law may discourage other companies from attempting to acquire us

Some provisions of our articles of incorporation and bylaws and of Pennsylvania law may discourage some transactions where we would otherwise experience a change in control. 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 stock 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 bylaws provide for a classified Board of Directors, shareholders may only remove directors for cause. These provisions and some provisions of the Pennsylvania Business Corporation Law could delay, defer or prevent us from experiencing a change in control and may adversely affect our common stockholders' voting and other rights.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

At September 30, 1999, we had a non-trading investment portfolio of fixed income securities, excluding those classified as cash and cash equivalents, of \$2.1 million (see Note 5 of the Company's Consolidated Financial Statements). At September 30, 1999, we also were obligated, under a foreign exchange contract, to purchase 1.6 million Swiss Francs in March 2000 for \$1.079 million. These securities, like all fixed income instruments, are subject to interest rate and exchange rate risk and may fall in value if market rates change. If market interest rates were to increase immediately and uniformly by 100 basis points and we experienced an adverse move in the Swiss currency rate of 10% there would be no material or adverse affect on our business, financial condition or operating results.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The consolidated Financial Statements of Kulicke and Soffa Industries, Inc. and its subsidiaries and Flip Chip Technologies, LLC, listed in the index appearing under Item 14 (a)(1)(a) and (b) herein are filed as part of this Report.

REPORT OF INDEPENDENT ACCOUNTANTS

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

In our opinion, the consolidated financial statements listed in the index appearing under Item 14 (a) (1) (a) on page 65 of this Annual Report on Form 10-K present fairly, in all material respects, the financial position of Kulicke and Soffa Industries, Inc and its subsidiaries at September 30, 1999 and September 30, 1998, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 1999, in conformity with accounting principles generally accepted in the United States. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 14 (a) (2) on page 65 presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania
December 6, 1999, except as to Note 15, which is as of December 15, 1999

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

| | <u>September 30,</u> | |
|---|--------------------------|-------------------------|
| | <u>1999</u> | <u>1998</u> |
| - | | |
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents (including time deposits: 1999 - \$ 912; 1998 - \$2,166) | \$ 37,155 | \$ 76,478 |
| Short-term investments | 2,190 | 30,422 |
| Accounts and notes receivable (less allowance for doubtful accounts: 1999 - \$ 1,727; 1998 - \$1,677) | 136,047 | 66,137 |
| Inventories, net | 61,782 | 47,573 |
| Prepaid expenses and other current assets | 9,906 | 5,303 |
| Refundable income taxes | 2,934 | 5,270 |
| Deferred income taxes | 11,071 | 2,608 |
| TOTAL CURRENT ASSETS | 261,085 | 233,791 |
| | | |
| Property, plant and equipment, net | 67,485 | 48,269 |
| Intangible assets, primarily goodwill (net of amortization: 1999 - \$10,276; 1998 - \$7,391) | 44,637 | 38,765 |
| Investments in and loans to joint ventures | 2,940 | 19,920 |
| Other assets | 1,998 | 1,839 |
| | | |
| TOTAL ASSETS | <u>\$ 378,145</u> | <u>\$342,584</u> |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Notes payable and current portion of long-term debt | \$ 1,178 | \$ 192 |
| Accounts payable | 61,962 | 24,223 |
| Accrued expenses | 27,210 | 23,549 |
| Income taxes payable | 3,604 | 3,646 |
| TOTAL CURRENT LIABILITIES | 93,954 | 51,610 |
| | | |
| Other liabilities | 4,373 | 3,064 |
| Minority interest | 5,042 | -- |
| TOTAL LIABILITIES | <u>103,369</u> | <u>54,674</u> |
| | | |
| COMMITMENTS AND CONTINGENCIES (Note 13) | -- | -- |
| | | |
| SHAREHOLDERS' EQUITY: | | |
| Preferred stock, without par value: | | |
| Authorized - 5,000 shares; issued - none | -- | -- |
| Common stock, without par value: | | |
| Authorized - 100,000 shares; issued and outstanding: 1999 - 23,489; 1998 - 23,367 | 160,108 | 157,986 |
| Retained earnings | 117,018 | 133,964 |
| Accumulated other comprehensive loss | (2,350) | (4,040) |
| TOTAL SHAREHOLDERS' EQUITY | <u>274,776</u> | <u>287,910</u> |
| | | |
| TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY | <u>\$378,145</u> | <u>\$342,584</u> |

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

KULICKE AND SOFFA INDUSTRIES, INC.
CONSOLIDATED STATEMENT OF OPERATIONS
(in thousands, except per share amounts)

| | <u>Fiscal Year Ended September 30,</u> | | |
|---|--|-------------------------|-------------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Net sales | \$398,917 | \$411,040 | \$501,907 |
| Cost of goods sold | <u>285,382</u> | <u>274,207</u> | <u>318,002</u> |
| Gross profit | 113,535 | 136,833 | 183,905 |
| Selling, general and administrative | 86,226 | 83,854 | 80,212 |
| Research and development, net | 37,188 | 48,715 | 46,030 |
| Resizing costs | 5,918 | 8,420 | -- |
| Purchased in-process research and development | <u>3,935</u> | <u>--</u> | <u>--</u> |
| Income (loss) from operations | (19,732) | (4,156) | 57,663 |
| Interest income | 3,762 | 5,776 | 3,151 |
| Interest expense | (215) | (262) | (2,331) |
| Equity in loss of joint ventures | <u>(10,000)</u> | <u>(8,715)</u> | <u>(6,701)</u> |
| Income (loss) before taxes | (26,185) | (7,357) | 51,782 |
| Provision (benefit) for income taxes | <u>(8,221)</u> | <u>(1,917)</u> | <u>13,463</u> |
| Income (loss) before minority interest | (17,964) | (5,440) | 38,319 |
| Minority interest in net loss of subsidiary | <u>1,018</u> | <u>--</u> | <u>--</u> |
| Net income (loss) | <u><u>\$(16,946)</u></u> | <u><u>\$(5,440)</u></u> | <u><u>\$ 38,319</u></u> |
| Net income (loss) per share: | | | |
| Basic | \$(0.72) | \$(0.23) | \$1.84 |
| Diluted | \$(0.72) | \$(0.23) | \$1.79 |
| Weighted average shares outstanding: | | | |
| Basic | 23,423 | 23,301 | 20,871 |
| Diluted | 23,423 | 23,301 | 21,428 |

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

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

| | <u>Fiscal Year Ended September 30,</u> | | |
|--|--|------------------|-------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| CASH FLOWS FROM OPERATING ACTIVITIES: | | | |
| Net income (loss) | \$(16,946) | \$ (5,440) | \$ 38,319 |
| Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities: | | | |
| Depreciation and amortization | 15,989 | 13,250 | 11,329 |
| Provision for doubtful accounts | 812 | 29 | 1,065 |
| Provision for impairment of goodwill | -- | 948 | -- |
| Deferred taxes | (8,463) | (1,087) | 244 |
| Provision for inventory reserves | 1,200 | 4,132 | 2,593 |
| Equity in loss of joint ventures | 10,000 | 8,715 | 6,701 |
| Minority interest in net loss of subsidiary | (1,018) | -- | -- |
| Purchased in-process research and development | 3,935 | -- | -- |
| Loss on write off and disposal of property and equipment | 1,566 | 1,484 | -- |
| Non-cash employee benefits | 1,662 | 2,240 | 1,793 |
| Changes in working capital accounts, net of effect of acquired businesses: | | | |
| Accounts receivable | (66,833) | 38,937 | (57,960) |
| Inventories | (14,700) | (6,103) | (3,201) |
| Prepaid expenses and other assets | (4,801) | (912) | (35) |
| Refundable income taxes | 2,336 | (5,270) | 6,212 |
| Accounts payable and accrued expenses | 36,182 | (24,568) | 30,668 |
| Taxes payable | 138 | (4,446) | 3,527 |
| Other, net | 1,012 | (185) | 726 |
| Net cash provided by (used in) operating activities | <u>(37,929)</u> | <u>21,724</u> | <u>41,981</u> |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | | |
| Purchase of net assets of Semitec; | | | |
| net of cash acquired | -- | -- | (4,510) |
| Purchases of investments classified as available-for-sale | (29,379) | (108,482) | (4,451) |
| Proceeds from sales or maturities of investments classified as available-for-sale | 57,454 | 86,199 | 9,967 |
| Purchases of plant and equipment | (10,891) | (16,062) | (13,516) |
| Purchase of X-LAM technology | (8,000) | -- | -- |
| Proceeds from sale of property and equipment | -- | 436 | -- |
| Investments in and loans to joint ventures | (10,912) | (14,500) | (19,280) |
| Net cash used in investing activities | <u>(1,728)</u> | <u>(52,409)</u> | <u>(31,790)</u> |
| CASH FLOWS FROM FINANCING ACTIVITIES: | | | |
| Payments on borrowings, including capitalized leases | (192) | (808) | (51,065) |
| Proceeds from issuances of common stock | 280 | 385 | 103,112 |
| Net cash provided by (used in) financing activities | <u>88</u> | <u>(423)</u> | <u>52,047</u> |
| EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS | 246 | (19) | 23 |
| CHANGE IN CASH AND CASH EQUIVALENTS | <u>(39,323)</u> | <u>(31,127)</u> | <u>62,261</u> |
| CASH AND CASH EQUIVALENTS AT: | | | |
| BEGINNING OF YEAR | 76,478 | 107,605 | 45,344 |
| END OF YEAR | <u>\$ 37,155</u> | <u>\$ 76,478</u> | <u>\$ 107,605</u> |

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

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

| | <u>Common Stock</u> | | <u>Retained Earnings</u> | <u>Accumulated Other Comprehensive Income (Loss)</u> | <u>Total Shareholders' Equity</u> |
|--|----------------------|-------------------------|--------------------------|--|-----------------------------------|
| | <u>Shares</u> | <u>Amount</u> | | | |
| - | | | | | |
| Balances at September 30, 1996 | 19,433 | \$48,733 | \$101,085 | \$(2,329) | \$147,489 |
| Common stock sold | 3,450 | 101,103 | -- | -- | 101,103 |
| Employer contribution to the 401(k) plan | 92 | 1,793 | -- | -- | 1,793 |
| Exercise of stock options | 262 | 2,009 | -- | -- | 2,009 |
| Tax benefit from exercise of stock options | -- | 1,608 | -- | -- | 1,608 |
| Components of comprehensive income: | | | | | |
| Net income | -- | -- | 38,319 | -- | 38,319 |
| Translation adjustment | -- | -- | -- | (394) | (394) |
| Total comprehensive income | | | | | <u>37,925</u> |
| Balances at September 30, 1997 | 23,237 | 155,246 | 139,404 | (2,723) | 291,927 |
| Employer contribution to the 401(k) plan | 89 | 2,240 | -- | -- | 2,240 |
| Exercise of stock options | 41 | 385 | -- | -- | 385 |
| Tax benefit from exercise of stock options | -- | 115 | -- | -- | 115 |
| Components of comprehensive loss: | | | | | |
| Net loss | -- | -- | (5,440) | -- | (5,440) |
| Translation adjustment | -- | -- | -- | (1,433) | (1,433) |
| Unrealized gain on investments, net | -- | -- | -- | 116 | 116 |
| Total comprehensive loss | | | | | <u>(6,757)</u> |
| Balances at September 30, 1998 | 23,367 | 157,986 | 133,964 | (4,040) | 287,910 |
| Employer contribution to the 401(k) plan | 84 | 1,662 | -- | -- | 1,662 |
| Exercise of stock options | 38 | 280 | -- | -- | 280 |
| Tax benefit from exercise of stock options | -- | 180 | -- | -- | 180 |
| Components of comprehensive loss: | | | | | |
| Net loss | -- | -- | (16,946) | -- | (16,946) |
| Translation adjustment | -- | -- | -- | 2,622 | 2,622 |
| Unrealized loss on investments, net | -- | -- | -- | (115) | (115) |
| Realized gain on investments included in net loss, net | -- | -- | -- | (49) | (49) |
| Minimum pension liability (net of taxes of \$413) | -- | -- | -- | (768) | (768) |
| Total comprehensive loss | | | | | <u>(15,256)</u> |
| Balances at September 30, 1999 | <u>23,489</u> | <u>\$160,108</u> | <u>\$117,018</u> | <u>\$(2,350)</u> | <u>\$274,776</u> |

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

KULICKE AND SOFFA INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data)

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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.

Nature of Business - The Company manufactures capital equipment and packaging materials used in the assembly of semiconductors. The Company's operating results primarily depend upon the capital expenditures of semiconductor manufacturers and subcontract assemblers worldwide which, in turn, depend on the current and anticipated market demand for semiconductors and products utilizing semiconductors. The semiconductor industry historically has been highly volatile and experienced periodic downturns and slowdowns which have had a severe negative effect on the semiconductor industry's demand for semiconductor capital equipment, including assembly equipment manufactured and marketed by the Company and, to a lesser extent, packaging materials such as those sold by the Company. These downturns and slowdowns have also 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.

The semiconductor and semiconductor equipment industries are subject to rapid technological change and frequent new product introductions and enhancements. The Company invests substantial amounts in research and development to continuously develop and manufacture new products and product enhancements in response to demands for higher performance assembly equipment. In addition, the Company continuously pursues investments in alternative packaging technologies. The Company's inability to successfully develop new products and product enhancements or to effectively manage the introduction of new products into the marketplace could have a material adverse effect on the Company's results of operations, financial condition and liquidity.

Management Estimates - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The more significant areas involving the use of estimates in these financial statements include allowances for uncollectible accounts receivable, reserves for excess and obsolete inventory, carrying value and lives of fixed assets, goodwill and intangibles assets, valuation allowances for deferred tax assets and deferred tax liabilities for unrepatriated earnings. Actual results could differ from those estimated.

Vulnerability to Certain Concentrations - Financial instruments which may subject the Company to concentration of credit risk at September 30, 1999 and 1998 consist primarily of investments and trade receivables. The Company manages credit risk associated with investments by investing its excess cash in investment grade debt instruments of the U.S. Government, 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 to take advantage of trends in yields and interest rates. The Company's trade receivables result primarily from the sale of semiconductor equipment, related accessories and replacement parts and packaging materials to a relatively small number of large manufacturers in a highly concentrated industry. The Company continually assesses the financial strength of its customers to reduce the risk of loss. Accounts receivable at September 30, 1999 and 1998 included notes receivable of \$10 and \$524 respectively. Writeoffs of uncollectible accounts have historically been insignificant.

Sales to a relatively small number of customers account for a significant percentage of the Company's net sales. In fiscal 1999 no customer accounted for more than 10% of net sales but in fiscal 1998, sales to Intel accounted for 17.6% of the Company's net sales and in fiscal 1997, sales to Anam (a Korea-based customer) and Intel accounted for approximately 12.5% and 10.2%, respectively, of net sales. The Company expects sales of its products to a limited number of customers will continue to account for a high percentage of net sales for the foreseeable future. The reduction or loss of orders from a significant customer could adversely affect the Company's business, financial condition, operating results and cash flows.

The Company relies on subcontractors to manufacture to the Company's specifications many of the components or subassemblies used in its products. Certain of the Company's products require components or parts of an exceptionally high degree of reliability, accuracy and performance for which there are only a limited number of suppliers or for which a single supplier has been accepted by the Company as a qualified supplier. If supplies of such components or subassemblies were not available from any such source and a relationship with an alternative supplier could not be promptly developed, shipments of the Company's products could be interrupted and re-engineering of the affected product could be required. Such disruptions could have a material adverse effect on the Company's results of operations.

Cash Equivalents - The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash equivalents.

Investments - Investments, other than cash equivalents, are classified as "trading," "available-for-sale" or "held-to-maturity," depending upon the nature of the investment, its ultimate maturity date in the case of debt securities, and management's intentions with respect to holding the securities. Investments classified as "trading" are reported at fair market value, with unrealized gains or losses included in earnings. Investments classified as available-for-sale are reported at fair market value, with net unrealized gains or losses reflected as a separate component of shareholders' equity (accumulated other comprehensive income (loss)). Investments classified as held-to-maturity are reported at amortized cost. Realized gains and losses are determined on the basis of specific identification of the securities sold.

Inventories - Inventories are stated at the lower of cost (determined on the basis of first-in, first-out) or market. Due to the volatility of demand for capital equipment and the rapid technological change in the semiconductor industry, the Company is vulnerable to risks of excess and obsolete inventory. The Company generally provides reserves for inventory considered to be in excess of 18 months of forecasted future demand.

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 to 40 years; machinery and equipment 3 to 8 years; 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. In accordance with SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," the carrying value of long-lived assets, including goodwill, is evaluated whenever changes in circumstances indicate the carrying amount of such assets may not be recoverable. In performing such review for recoverability, the Company compares the expected future cash flows to the carrying value of long-lived assets and identifiable intangibles. If the anticipated undiscounted future cash flows are less than the carrying amount of such assets, the Company recognizes an impairment loss for the difference between the carrying amount of the assets and their estimated fair value. If an asset being tested for recoverability was acquired in a business combination accounted for using the purchase method, the excess of cost over fair value of net assets that arose in that transaction is allocated to the assets being tested for recoverability on a pro rata basis using the relative fair values of the long-lived assets and identifiable intangibles acquired at the acquisition date.

Depreciation expense was \$13,104, \$10,896 and \$8,945 for the fiscal years ended September 30, 1999, 1998 and 1997, respectively. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation accounts are adjusted accordingly, and any resulting gain or loss is recorded in current operations.

Intangible Assets - Goodwill resulting from acquisitions accounted for using the purchase method is amortized on a straight-line basis over the estimated period to be benefited by the acquisitions ranging from five to twenty years. The Company accounts for impairment of goodwill in accordance with SFAS No. 121, as discussed above. In connection with the Company's resizing efforts in fiscal 1998, the Company discontinued certain die bonder products which the Company had acquired in 1994, and recorded an impairment of goodwill of \$948.

Foreign Currency Translation - The U.S. dollar is the functional currency for all subsidiaries except the Company's subsidiaries in Japan, Korea, Singapore, Switzerland and Taiwan. Unrealized translation gains and losses resulting from the translation of functional currency financial statement amounts into U.S. dollars 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)), in accordance with SFAS No. 52. 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. Net exchange and transaction gains (losses) were \$13, (\$147) and (\$135), for the fiscal years ended September 30, 1999, 1998 and 1997, respectively.

Revenue Recognition - Sales are recorded upon shipment of products or performance of services. Provisions for estimated product returns, warranty and installation costs are accrued in the period of sale recognition.

Research and Development Arrangements - The Company receives funding from certain customers and government agencies pursuant to contracts or other arrangements for the performance of specified research and development activities. Such amounts are recognized as a reduction of research and development expense when specified activities have been performed. During fiscal 1999, 1998 and 1997, reductions to research and development expense related to such funding totaled \$1,269, \$1,655 and \$2,018, respectively.

Income Taxes - Deferred income taxes are determined using the liability method in accordance with SFAS No. 109, "Accounting for Income Taxes." No provision is made for U.S. income taxes on the portion of undistributed earnings of foreign subsidiaries which are indefinitely reinvested in foreign operations.

Environmental Expenditures - Future environmental remedial expenditures are recorded in operating expenses when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. Accrued liabilities do not include claims against third parties and are not discounted.

Earnings Per Share - In the fiscal 1998 first quarter ended December 31, 1997, the Company adopted Statement of Financial Accounting Standards No. 128, "Earnings Per Share," ("SFAS 128"). Under SFAS 128, basic earnings per share includes only the weighted average number of common shares outstanding during the period. Diluted earnings per share includes the weighted average number of common shares and the dilutive effect of stock options and other potentially dilutive securities outstanding during the period. All prior period earnings per share amounts have been restated to reflect the requirements of SFAS 128. See Note 12.

Accounting for Stock-based Compensation - In 1995, Statement of Financial Accounting Standards No. 123 - "Accounting for Stock-Based Compensation" ("SFAS 123") was issued. SFAS 123 defines the "fair value method" of accounting for stock options or similar equity instruments, pursuant to which compensation cost is measured at the grant date based on the value of the award and is recognized over the service period. SFAS 123 permits companies to continue to account for stock option grants using the "intrinsic value method" prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB No. 25"), and disclose the pro forma effect on net income and earnings per share as if the fair value method had been applied to stock option grants. The Company has elected to follow the disclosure basis only, as permitted by SFAS 123.

Reporting Comprehensive Income - In fiscal 1999, the Company adopted Statement of Financial Accounting Standards No. 130, "Reporting Comprehensive Income" ("SFAS 130"), which establishes standards for reporting and display of comprehensive income and its components (revenues, expenses, gains and losses) in a full set of general purpose financial statements. The comprehensive income and related cumulative equity impact of comprehensive income items are required to be reported in a financial statement that is displayed with the same prominence as other financial statements. The impact of foreign currency translation adjustments, minimum pension liability adjustments and unrealized gains or losses on securities available for sale are considered to be components of the Company's comprehensive income under the requirements of SFAS 130.

Segment Disclosure - In fiscal 1998, the Company adopted Statement of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS 131"). SFAS 131 supersedes SFAS 14, Financial Reporting for Segments of a Business Enterprise, replacing the "industry segment" approach with the "management" approach. The management approach designates the internal organization that is used by management for making operating decisions and assessing performance as the source of the Company's reportable segments. SFAS 131 also requires disclosure about products and services, geographic areas, and major customers. The adoption of SFAS 131 did not affect results of operations or financial position but did affect the disclosure of segment information (see "Segment Information" Note 11).

Derivative Instruments and Hedging Activities - In June 1998, Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133") was issued. SFAS 133 establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. This Statement is effective for all fiscal quarters for financial statements for fiscal years commencing after June 15, 2000. Management does not believe that the adoption of SFAS 133 will have a material impact on the financial statements.

Reclassifications - Certain amounts in the Company's prior year financial statements have been reclassified to conform to their presentation in the current fiscal year.

NOTE 2: RESIZING COSTS

During fiscal 1999, the Company announced plans to relocate its automatic ball bonder manufacturing from Willow Grove, Pennsylvania to Singapore. As a result, the Company recorded a charge for severance of \$3,955 for the elimination of approximately 230 positions and asset writeoffs of \$1,566. In fiscal 1999, the Company also recorded a charge of \$397 for severance for an additional 30 employees related to the reduction in workforce that began in fiscal 1998.

Write-downs of property, plant and equipment were made where carrying values exceeded the Company's estimate of proceeds from abandonment or disposal. These estimates were based principally on past experience of comparable asset disposals. Cash payments for severance and the disposition of assets identified are expected to be substantially paid or completed by the end of fiscal 2000.

During fiscal 1998, the Company announced plans to resize its workforce and discontinue products due to a slowdown in orders for its semiconductor assembly capital equipment and to a lesser extent for its semiconductor packaging materials. As a result of the resizing activities, the Company reduced its worldwide workforce by approximately 21% or 500 employees. The Company recorded a total resizing charge of \$8,420 in 1998 for severance (\$4,953), impairment of goodwill associated with the 1994 acquisition of certain assets from Assembly Technologies (\$948), product discontinuation costs (\$1,891; primarily writeoff of fixed assets and excess inventory) and other costs (\$628).

Concurrent with the resizing charge in fiscal 1998 of \$8,420, the Company recorded in 1998 charges in its cost of goods sold of \$2,362 for excess and obsolete inventory and \$1,426 for excess purchase commitments resulting from the slowdown in orders for its semiconductor assembly equipment.

The balance of the severance and other resizing reserves is included within accrued liabilities. The components of these resizing reserves and movements within these components during 1999 were as follows:

| | <u>Severance</u> | <u>Other</u> | <u>Total</u> |
|-------------------------------|------------------|---------------|-----------------|
| Balance at September 30, 1998 | \$ 3,088 | \$ 628 | \$ 3,716 |
| Provision in fiscal 1999 | 4,352 | -- | 4,352 |
| Payments made | (3,296) | (147) | (3,443) |
| Balance at September 30, 1999 | <u>\$ 4,144</u> | <u>\$ 481</u> | <u>\$ 4,625</u> |

The severance resizing reserve at September 30, 1999 is comprised of the elimination of approximately 230 positions associated with the move of the ball bonder manufacturing to Singapore and expensed in fiscal 1999 and 3 employees terminated in association with the fiscal 1998 reduction in workforce and expensed in fiscal 1998.

During fiscal 1999, payments of \$3,296 were made related to the termination of approximately 285 employees.

NOTE 3: INVESTMENTS IN JOINT VENTURES

In February 1996, the Company entered into a joint venture agreement with Delco Electronics Corporation ("Delco") providing for the formation and management of Flip Chip Technologies, LLC ("FCT"). FCT was formed to license related technologies and to provide wafer bumping services on a contract basis. The Company owned a 51.0% equity interest in FCT but participated equally with Delco in the management of FCT through an Executive Committee. Accordingly, the Company accounted for its investment in FCT using the equity method, and recognized its proportionate share of the operating results of the joint venture on the basis of its ownership interest through September 30, 1998. For the first eight months of fiscal 1999, the Company recognized 100% of the FCT pre-tax loss and did not recognize interest income on loans to FCT due to the existence of these loans and uncertainties about FCT's ability to obtain additional financing from Delco and its ability to generate short-term positive cash flow.

Effective May 31, 1999 the Company increased its ownership interest in FCT, from 51.0% to 73.6% by converting all of its outstanding loans and accrued interest to FCT, which totaled \$32,832, into equity units and gained operating control of FCT. The Company accounted for the increase in ownership by the purchase method of accounting and began consolidating the results of FCT into the Company's financial statements on June 1, 1999. The pre-tax loss of FCT for fiscal 1999 was \$14,583 compared to \$17,087 in fiscal 1998. The Company's share of the FCT pre-tax loss, reflected in its financial statements, was \$12,166 in fiscal 1999, \$8,715 in fiscal 1998 and \$6,701 in fiscal 1997. The \$12,166 pre-tax loss in fiscal 1999 consists of \$3,003 of losses for the four months after the Company began reporting FCT on a consolidated basis and a loss of \$9,163 for the eight months when FCT was accounted for by the equity method of accounting and reflected in Equity in Loss of Joint Ventures.

The Company recorded goodwill of \$5,205 associated with the increase in ownership of FCT and is amortizing the goodwill over 10 years. For income tax purposes, FCT is treated as a partnership, accordingly, no provision for income tax is included in FCT's separate financial statements. Rather, the Company's share of the results of FCT were reported on a pre-tax basis until May 31, 1999.

Through September 30, 1999, the Company had contributed \$49,662 to FCT.

Unaudited pro forma operating results of the Company, assuming the increase in ownership of FCT took place at the beginning of fiscal 1998, are as follows:

| | Fiscal Year ended | |
|------------------------------|--------------------------|-------------|
| | September 30, | |
| | 1999 | 1998 |
| | (unaudited) | |
| Net sales | \$ 418,157 | \$ 415,382 |
| Net loss | (16,268) | (8,719) |
| Net loss per share - diluted | (0.69) | (0.37) |

The pro forma operating results reflected above are not necessarily indicative of the future operating results of the Company.

Selected assets and liabilities of FCT, which are consolidated in the Company's balance sheet at September 30, 1999, are:

| | September 30, 1999 |
|------------------------------------|---------------------------|
| Cash | \$ 839 |
| Current assets | 3,711 |
| Property, plant and equipment, net | 20,844 |
| Total assets | 24,946 |
| Current liabilities | 5,873 |
| Total liabilities | 5,873 |

In September 1998, the Company entered into a joint venture agreement with Polyset Company, Inc. ("Polyset") providing for the formation and management of Advanced Polymer Solutions, LLC ("APS") to develop, manufacture and market advanced polymer materials for semiconductor and microelectronic packaging end users. The Company owns a 50% equity interest in APS and participates equally with Polyset in the management of APS

through an Executive Committee. Accordingly, the Company accounts for its investment in APS using the equity method, and recognizes its proportionate share of the operating results of the joint venture on the basis of its ownership interest. For income tax purposes, APS is treated as a partnership. Accordingly, no provision for income taxes is included in APS's separate financial statements. Rather, the Company's proportionate share of the results of APS are reported on a pre-tax basis. For the fiscal year ended September 30, 1999, the Company reported a pre-tax loss of \$837 on its investment in APS. Through September 30, 1999, the company had contributed approximately \$3,800 to APS and has committed to contribute up to \$6,000.

NOTE 4: PURCHASED IN-PROCESS RESEARCH AND DEVELOPMENT

Purchased in-process research and development represents the value assigned in a purchase business combination to research and development projects of the acquired business that were commenced but not yet completed at the date of acquisition, for which technological feasibility has not been established and which have no alternative future use in research and development activities or otherwise. In accordance with Statement of Financial Accounting Standards No. 2, "Accounting for Research and Development Costs," as interpreted by Interpretation No. 4, amounts assigned to purchased in-process research and development meeting the above criteria must be charged to expense at the date of consummation of the purchase business combination.

In January 1999, the Company purchased enabling technology and fixed assets used in the design, development, manufacture, marketing and sale of laminate substrates (the "X-LAM technology") for \$8.0 million. The Company has allocated the majority of the purchase price to intangible assets, including in-process research and development. The portion of the purchase price allocated to in-process research and development was charged to expense in fiscal 1999. The other purchased intangibles include core technology and assembled workforce. These intangibles are being amortized over their estimated useful lives of 1 – 5 years.

The Company allocated the purchase price as follows:

| | |
|-------------------------------------|-----------------|
| In-process research and development | \$ 3,935 |
| Core technology | 3,447 |
| Property, plant and equipment | 513 |
| Assembled workforce | <u>105</u> |
| | <u>\$ 8,000</u> |

The Company obtained an independent valuation of the purchased in-process research and development. The income valuation approach was used to determine the fair value of the in-process research and development. The Company estimated that the purchased technology was 60% complete and the technology would be marketable in fiscal 2000 and would generate positive cash flow beginning in fiscal 2001. These estimates are subject to change, given uncertainties of the development process, and no assurance can be given that deviations from these estimates will not occur.

NOTE 5: INVESTMENTS

At September 30, 1999 and 1998, no short-term investments were classified as trading or held-to-maturity. Investments, excluding cash equivalents, consisted of the following at September 30, 1999 and 1998:

| | <u>September 30, 1999</u> | | | <u>September 30, 1998</u> | | |
|---|---------------------------|---|----------------------|---------------------------|---|----------------------|
| | Fair <u>Value</u> | Unrealized Gains/ <u>(Losses)</u> | Cost <u>Basis</u> | Fair <u>Value</u> | Unrealized Gains/ <u>(Losses)</u> | Cost <u>Basis</u> |
| Available-for-sale: | | | | | | |
| U.S. Treasuries | \$ -- | \$ -- | \$ -- | \$ 2,355 | \$ 21 | \$ 2,334 |
| Corporate debt securities | -- | -- | -- | 28,067 | 136 | 27,931 |
| Adjustable rate notes | <u>2,190</u> | <u>(74)</u> | <u>2,264</u> | -- | -- | -- |
| Short-term investments classified as available for sale | <u>\$ 2,190</u> | <u>\$ (74)</u> | <u>\$ 2,264</u> | <u>\$30,422</u> | <u>\$ 157</u> | <u>\$ 30,265</u> |

An after-tax unrealized loss of \$48 (net of taxes of \$26) and an after-tax unrealized gain of \$116 (net of taxes of \$41) were recorded as direct adjustments to shareholders' equity at September 30, 1999 and September 30, 1998, respectively.

NOTE 6: BALANCE SHEET COMPONENTS

| | <u>September 30,</u> | |
|----------------------------|-------------------------|-------------------------|
| | <u>1999</u> | <u>1998</u> |
| Inventories: | | |
| Raw materials and supplies | \$ 35,981 | \$ 28,062 |
| Work in process | 24,033 | 11,381 |
| Finished goods | 16,696 | 23,788 |
| | 76,710 | 63,231 |
| Inventory reserves | (14,928) | (15,658) |
| | <u>\$ 61,782</u> | <u>\$ 47,573</u> |

| | <u>September 30,</u> | |
|---------------------------------------|------------------------|-------------------------|
| | <u>1999</u> | <u>1998</u> |
| Property, Plant and Equipment: | | |
| Land | \$ 1,453 | \$ 1,453 |
| Buildings and building improvements | 21,608 | 21,124 |
| Machinery and equipment | 105,148 | 72,992 |
| Leasehold improvements | 15,960 | 4,289 |
| | 144,169 | 99,858 |
| Accumulated depreciation | (76,684) | (51,589) |
| | <u>\$67,485</u> | <u>\$ 48,269</u> |

Accrued expenses at September 30, 1999 and 1998 include \$12,100 and \$10,981, respectively, for accrued wages, incentives and vacations.

NOTE 7: DEBT OBLIGATIONS

At September 30, 1999, the Company recorded a short-term debt obligation of \$1,178 reflecting debt due to Delco, the 26.4% owner of FCT, by FCT. At September 30, 1998 the Company's debt obligations consisted entirely of capital lease obligations which matured in fiscal 1999. Interest paid on the Company's debt obligations totaled \$215, \$262 and \$2,331, in fiscal 1999, 1998 and 1997, respectively.

The Company has a \$60,000 revolving credit facility expiring on March 26, 2003. At September 30, 1999, the Company had no cash borrowings outstanding under the credit facility, but had utilized \$960 of availability under the credit facility to support letters of credit issued as security deposits for its new manufacturing facility in Singapore and its new X-LAM facility. The revolving credit facility provides for borrowings denominated in either U.S. dollars or foreign currencies. Borrowings in U.S. dollars bear interest either at a Base Rate (defined as the greater of the prime rate minus 1/4% or the federal funds rate plus 1/2%) or, at a LIBOR Rate (defined as LIBOR plus .4% to .8%, depending on the Company's leverage ratio). Foreign currency borrowings bear interest at a LIBOR Rate, as defined above, applicable to the foreign currency.

The Amended and Restated Loan Agreement is guaranteed by certain of the Company's domestic subsidiaries and requires the Company maintain certain financial covenants including a leverage ratio and an interest coverage ratio or liquidity ratio. The Amended and Restated Loan Agreement also limits the Company's ability to mortgage, pledge or dispose of a material portion of its assets and imposes restrictions on the Company's investments and acquisitions. There were no borrowings under this bank credit facility during fiscal 1999. The Company was in compliance with the covenants of the Amended and Restated Loan Agreement as of September 30, 1999.

NOTE 8: SHAREHOLDERS' EQUITY

Common Stock

In May 1997, the Company completed the sale of 3,450,000 shares of its common stock in an underwritten offering, resulting in net proceeds to the Company approximating \$101,103. A portion of these proceeds was used to repay the \$50,000 outstanding balance under the Company's existing bank revolving credit facility.

Stock Option Plans

The Company has six employee stock option plans covering substantially all employees (the "Employee Plans") pursuant to which options have been or may be granted at 100% of the market price of the Company's Common Stock on the date of grant. Options may no longer be granted under three of the plans. Options granted under the Employee Plans are exercisable at such dates as are determined in connection with their issuance, but not later than ten years after the date of grant.

The following summarizes all employee stock option activity for the three years ended September 30, 1999:

| | September 30, | | | | | |
|--|------------------------------|----------------|-----------------|----------------|-----------------|----------------|
| | 1999 | | 1998 | | 1997 | |
| | Average | | Average | | Average | |
| | Exercise | | Exercise | | Exercise | |
| | Price | | Price | | Price | |
| | Options | Options | Options | Options | Options | Options |
| | (Share amounts in thousands) | | | | | |
| Options outstanding at beginning of period | 2,180 | \$17.98 | 1,072 | \$ 15.05 | 815 | \$ 15.08 |
| Granted or reissued | 835 | 25.79 | 1,300 | 20.64 | 552 | 12.00 |
| Exercised | (38) | 7.54 | (41) | 9.62 | (231) | 7.72 |
| Terminated or canceled | (111) | 19.61 | (151) | 22.36 | (64) | 15.94 |
| Options outstanding at end of period | <u>2,866</u> | 20.33 | <u>2,180</u> | 17.98 | <u>1,072</u> | 15.05 |
| Options exercisable at end of period | <u>702</u> | 16.58 | <u>317</u> | 13.79 | <u>132</u> | 12.35 |

The Company also maintains two stock option plans for non-officer directors (the "Director Plans") pursuant to which options to purchase 5,000 shares of the Company's Common Stock at an exercise price of 100% of the market price on the date of grant are issued to each non-officer director each year. Options can no longer be granted under one of these plans. Options to purchase 201,000 shares at an average exercise price of \$19.87 were outstanding under the Director Plans at September 30, 1999, of which options to purchase 97,000 shares were currently exercisable. No options under the Director Plans were exercised during 1999.

At September 30, 1999, 4,664,000 shares were reserved for issuance and 1,798,000 shares were available for grant in connection with the Employee Plans and 626,000 shares were reserved for issuance and 425,000 shares were available for grant in connection with the Director Plans.

The following table summarizes information concerning currently outstanding and exercisable options at September 30, 1999:

| Range of Exercise Prices | Options Outstanding | | | Options Exercisable | |
|---------------------------------|------------------------------|--|--|------------------------------|--|
| | (Share amounts in thousands) | | | (Share amounts in thousands) | |
| | Number Outstanding | Weighted Average Remaining Contractual Life | Weighted Average Exercise Price | Number Exercisable | Weighted Average Exercise Price |
| \$ 2.62 - \$10.00 | 220 | 4.4 | \$7.04 | 168 | \$6.72 |
| \$10.01 - \$20.00 | 1,289 | 8.2 | \$12.94 | 361 | \$12.63 |
| \$20.01 - \$30.00 | 839 | 9.9 | \$25.78 | 2 | \$23.63 |
| \$30.01 - \$39.00 | <u>518</u> | 7.3 | \$35.55 | <u>171</u> | \$34.56 |
| | <u>2,866</u> | 8.2 | \$20.33 | <u>702</u> | \$16.58 |

As permitted under Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), the Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), in accounting for stock options granted to employees. Under APB 25, the Company generally recognizes no compensation expense in the income statement with respect to such grants.

Unaudited pro forma information regarding net income and earnings per share is required by SFAS 123 for options granted after October 1, 1995 as if the Company had accounted for its stock option grants to employees under the fair value method of SFAS 123. The fair value of the Company's stock option grants to employees was estimated using a Black-Scholes option pricing model.

The following assumptions were employed to estimate the fair value of stock options granted to employees:

| | Fiscal Year Ended September 30, | | |
|---------------------------------|--|--------------------|--------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Expected dividend yield | \$0.00 | \$0.00 | \$0.00 |
| Expected stock price volatility | 74.00% | 73.00% | 71.00% |
| Risk-free interest rate | 5.84% | 5.40% | 6.16% |
| Expected life (years) | 8 | 7 | 6 |

For pro forma purposes, the estimated fair value of the Company's stock options to employees is amortized over the options' vesting period. The Company's pro forma information follows:

| | Fiscal Year Ended September 30, | | |
|--|--|--------------------|--------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Weighted average fair value of options granted | \$19.92 | \$ 15.18 | \$ 8.22 |
| Net income (loss) - as reported | (16,946) | (5,440) | 38,319 |
| Net income (loss) - unaudited pro forma | (20,499) | (8,040) | 37,069 |
| Net income (loss) per share - as reported, diluted | (.72) | (0.23) | 1.79 |
| Net income (loss) per share - unaudited pro forma, diluted | (.88) | (0.35) | 1.72 |

NOTE 9: EMPLOYEE BENEFIT PLANS

The Company has a non-contributory defined benefit pension plan covering substantially all U.S. employees who were employed on September 30, 1995. The benefits for this plan were based on the employees' years of service and the employees' compensation during the three years before retirement. The Company's funding policy is consistent with the funding requirements of Federal law and regulations. Effective December 31, 1995, the benefits under the Company's pension plan were frozen. As a consequence, accrued benefits no longer change as a result of an employee's length of service or compensation. In fiscal 1999, the Company adopted SFAS No. 132, "Employers' Disclosures about Pension and Other Post-retirement Benefits." The disclosures for fiscal 1998 and 1997 have been restated for comparative purposes.

Detailed information regarding the Company's defined benefit pension is as follows:

| | Fiscal Year Ended September 30, | | |
|---|--|--------------------|--------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Change in benefit obligation: | | | |
| Benefit obligations at beginning of year: | \$11,802 | \$11,198 | \$10,340 |
| Interest cost | 885 | 840 | 776 |
| Benefits paid | (407) | (405) | (399) |
| Actuarial (gain) loss | (324) | 169 | 481 |
| Benefit obligation at end of year | <u>\$11,956</u> | <u>\$11,802</u> | <u>\$11,198</u> |

| | Fiscal Year Ended September 30, | | |
|---|--|--------------------|--------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Change in plan assets: | | | |
| Fair value of plan assets at beginning of year: | \$10,542 | \$10,372 | \$ 9,770 |
| Actual return on plan assets | 1,066 | 490 | 980 |
| Employer contributions | -- | 85 | 21 |
| Benefits paid | <u>(407)</u> | <u>(405)</u> | <u>(399)</u> |
| Fair value of assets at end of year | <u>\$11,201</u> | <u>\$10,542</u> | <u>\$10,372</u> |
| Reconciliation of funded status: | | | |
| Funded status | \$ (755) | \$(1,260) | \$ (826) |
| Unrecognized actuarial loss | <u>1,181</u> | <u>1,749</u> | <u>1,245</u> |
| Net amount recognized at year-end | <u>\$ 426</u> | <u>\$ 489</u> | <u>\$ 419</u> |
| Amount recognized in the statement of financial position consists of: | | | |
| Accrued benefit liability | \$ (755) | \$(1,260) | \$ (826) |
| Accumulated other comprehensive income /unrecognized net loss | <u>1,181</u> | <u>1,749</u> | <u>1,245</u> |
| Net amount recognized at year-end | <u>\$ 426</u> | <u>\$ 489</u> | <u>\$ 419</u> |
| Components of net periodic benefit cost: | | | |
| Interest cost | \$ 885 | \$ 840 | \$ 776 |
| Expected return on plan assets | (858) | (833) | (720) |
| Recognized actuarial loss | <u>36</u> | <u>8</u> | <u>--</u> |
| Net periodic benefit cost | <u>\$ 63</u> | <u>\$ 15</u> | <u>\$ 56</u> |
| Weighted-average assumptions as of September 30: | | | |
| Discount rate | 7.75% | 7.50% | 7.50% |
| Expected long-term rate of return on plan assets | 8.00% | 8.00% | 7.00% |
| Rate of compensation increase | * | * | * |

* Not applicable due to the December 31, 1995 benefit freeze.

The Company's foreign subsidiaries have retirement plans that are integrated with and supplement the benefits provided by laws of the various countries. They are not required to report nor do they determine the actuarial present value of accumulated benefits or net assets available for plan benefits. The Company believes these plans are substantially fully funded as to vested benefits. On a consolidated basis, pension expense was \$998, \$914 and \$991, in fiscal 1999, 1998 and 1997, respectively.

The Company has a 401(k) Employee Incentive Savings Plan. This plan allows for employee contributions and matching Company contributions in varying percentages, depending on employee age and years of service, ranging from 30% to 175% of the employees' contributions. The Company's contributions under this plan totaled \$1,662, \$2,240 and \$1,793 in fiscal 1999, 1998 and 1997, respectively, and were satisfied by contributions of shares of Company common stock, valued at the market price on the date of the matching contribution.

NOTE 10: INCOME TAXES

Income (loss) before income taxes and after minority interest in net loss consisted of the following:

| | Fiscal Year Ended September 30, | | |
|--------------------------|--|--------------------|--------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| United States operations | \$(43,663) | \$ (17,953) | \$ 32,879 |
| Foreign operations | <u>18,496</u> | <u>10,596</u> | <u>18,903</u> |
| | <u>\$(25,167)</u> | <u>\$ (7,357)</u> | <u>\$ 51,782</u> |

The provision (benefit) for income taxes included the following:

| | <u>Fiscal Year Ended September 30,</u> | | |
|-----------|--|-------------------|-----------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Current: | | | |
| Federal | \$ (2,218) | \$ (7,210) | \$ 8,722 |
| State | 50 | 50 | 700 |
| Foreign | 2,410 | 4,155 | 3,797 |
| Deferred: | | | |
| Federal | (8,613) | 840 | 244 |
| Foreign | 150 | 248 | -- |
| | <u>\$ (8,221)</u> | <u>\$ (1,917)</u> | <u>\$13,463</u> |

The provision (benefit) for income taxes differed from the amount computed by applying the statutory federal income tax rate as follows:

| | <u>Fiscal Year Ended September 30,</u> | | |
|---|--|-------------------|------------------|
| | <u>1999</u> | <u>1998</u> | <u>1997</u> |
| Computed income tax expense (benefit) based on U.S. statutory rate | \$ (8,808) | \$ (2,575) | \$18,124 |
| Effect of earnings of foreign subsidiaries subject to different tax rates | 603 | (289) | (1,212) |
| Benefits from Israeli Approved Enterprise Zones | (4,509) | (1,532) | (1,049) |
| Benefits of net operating loss and tax credit carryforwards and change in valuation allowance | 4,200 | (951) | (1,819) |
| Non-deductible goodwill amortization | 677 | 677 | 659 |
| Provision for repatriation of certain foreign earnings, including foreign withholding taxes | 150 | 3,298 | -- |
| Effect of revisions of prior year's estimated taxes | (533) | (779) | (205) |
| Benefits of Foreign Sales Corporation | -- | -- | (985) |
| Other, net | (1) | 234 | (50) |
| | <u>\$ (8,221)</u> | <u>\$ (1,917)</u> | <u>\$ 13,463</u> |

Undistributed earnings of certain foreign subsidiaries for which taxes have not been provided approximate \$40,447 at September 30, 1999. Such undistributed earnings are intended to be indefinitely reinvested in foreign operations.

Undistributed earnings approximating \$73,000 are not considered to be indefinitely reinvested in foreign operations. Accordingly, as of September 30, 1999, deferred tax liabilities of \$12,414 including withholding taxes but net of estimated foreign tax credits, have been provided.

Deferred income taxes are determined based on the differences between the financial reporting and tax basis of assets and liabilities as measured by the current tax rates. The net deferred tax balance is composed of the tax effects of cumulative temporary differences, as follows:

| | <u>September 30,</u> | |
|---|----------------------|---------------|
| | <u>1999</u> | <u>1998</u> |
| Repatriation of foreign earnings, including foreign withholding taxes | \$ 12,414 | \$ 12,264 |
| Depreciable assets | 2,592 | 2,073 |
| Prepaid expenses and other | 1,541 | 831 |
| Total deferred tax liability | <u>16,547</u> | <u>15,168</u> |

| | <u>September 30,</u> | |
|-----------------------------------|----------------------|-----------------|
| | <u>1999</u> | <u>1998</u> |
| Inventory reserves | 2,291 | 3,299 |
| Warranty accrual | 655 | 750 |
| Other accruals and reserves | 2,298 | 3,621 |
| Intangible assets | 1,446 | -- |
| Domestic NOL carryforwards | 19,430 | 3,894 |
| Foreign NOL carryforwards | 6,359 | 4,436 |
| Domestic tax credit carryforwards | 5,409 | 6,730 |
| Deferred intercompany profit | <u>1,945</u> | <u>2,137</u> |
| | 39,833 | 24,867 |
| Valuation allowance | <u>(12,215)</u> | <u>(7,091)</u> |
| Total deferred tax asset | <u>27,618</u> | <u>17,776</u> |
| Net deferred tax asset | <u>\$ 11,071</u> | <u>\$ 2,608</u> |

Realization of deferred tax assets associated with the net operating loss and tax credit carryforwards is dependent upon generating sufficient taxable income prior to their expiration in the respective tax jurisdictions. The Company believes there is a risk that certain of these tax credits carryforwards may expire unused and, accordingly, has established certain valuation allowances. The valuation allowance at September 30, 1999 relates to U.S. foreign tax credit carryforwards expiring through the year 2014, acquired domestic net operating loss carryforwards expiring through the year 2010 whose realization is limited to the U.S. earnings of the acquired company, and foreign net operating loss carryforwards which are scheduled to expire through the 2004 fiscal year. Although realization is not assured for the remaining deferred tax assets, the Company believes it is more likely than not that they will be realized through future taxable earnings or alternative tax strategies. However, the net deferred tax assets could be reduced in the near term if the Company's estimates of taxable income during the carryforward period are significantly reduced or alternative tax strategies are no longer viable. In the event the tax benefits relating to acquired net operating loss carryforwards are realized, such benefits would reduce the recorded amount of goodwill.

The IRS is currently auditing the Company's federal income tax returns for fiscal 1995, 1996, 1997 and 1998. Management believes sufficient taxes have been provided in prior years and that the ultimate outcome of the IRS audits will not have a material adverse impact on the Company's financial position, results of operations or cash flows.

The Company paid income taxes of \$3,753, \$8,817 and \$9,965, in fiscal 1999, 1998 and 1997, respectively.

NOTE 11: SEGMENT INFORMATION

The Company evaluates performance of its segments and allocates resources to them based on income from operations before interest, allocations of corporate expenses and income taxes.

The Company operates primarily in three industry segments: equipment, packaging materials and advanced packaging technologies. The equipment business unit designs, manufactures and markets capital equipment and related spare parts for use in the semiconductor assembly process. Equipment also services, maintains, repairs and upgrades assembly equipment. The packaging materials business designs, manufactures and markets consumable packaging materials for use on the equipment the company markets as well as on competitors' equipment. The packaging materials products have different manufacturing processes, distribution channels and a less volatile revenue pattern than the Company's capital equipment. The advanced packaging technology business unit was established in fiscal 1999 to reflect the Company's strategic initiative to develop new technologies for advanced semiconductor packaging. This segment is comprised of FCT and the Company's X-LAM business unit. The products of all segments are, or will be, for sale to semiconductor device manufacturers. The Company's equity method investment in APS is considered part of the packaging materials segment.

The table below presents information about reported segments:

| | Equipment | Packaging Materials | Advanced Packaging Technology | Corporate, Other and Eliminations | Consolidated |
|--|-----------------------|------------------------|-------------------------------------|---|-----------------------|
| <u>Fiscal Year Ended September 30, 1999</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> |
| Net sales | \$269,854 | 124,450 | \$ 4,613 | \$ - | \$398,917 |
| Cost of goods sold | 188,958 | 90,326 | 6,098 | -- | 285,382 |
| Gross profit | 80,896 | 34,124 | (1,485) | -- | 113,535 |
| Operating expenses | 86,239 | 23,500 | 5,314 | 8,361 | 123,414 |
| Resizing costs | 5,918 | -- | -- | -- | 5,918 |
| Purchased in-process research and development | -- | -- | -- | 3,935 | 3,935 |
| Income (loss) from operations | <u>\$(11,261)</u> | <u>\$10,624</u> | <u>\$(6,799)</u> | <u>\$(12,296)</u> | <u>\$(19,732)</u> |
| Equity in loss of joint ventures | <u>\$ --</u> | <u>\$(837)</u> | <u>\$(9,163)</u> | <u>\$ --</u> | <u>\$(10,000)</u> |
| Segment assets | \$200,837 | \$86,398 | \$37,560 | \$53,350 | \$378,145 |
| Capital expenditures | 6,522 | 2,136 | 2,233 | -- | 10,891 |
| Depreciation expense | 7,339 | 3,951 | 1,814 | -- | 13,104 |

| | Equipment | Packaging Materials | Corporate, Other and Eliminations | Consolidated |
|--|-----------------------|------------------------|---|-----------------------|
| <u>Fiscal Year Ended September 30, 1998</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> |
| Net sales | \$302,107 | \$108,933 | \$ -- | \$411,040 |
| Cost of goods sold | 191,948 | 82,259 | -- | 274,207 |
| Gross profit | 110,159 | 26,674 | -- | 136,833 |
| Operating expenses | 101,099 | 22,829 | 8,641 | 132,569 |
| Resizing costs | 5,984 | 1,724 | 712 | 8,420 |
| Income (loss) from operations | <u>\$ 3,076</u> | <u>\$ 2,121</u> | <u>\$(9,353)</u> | <u>\$(4,156)</u> |
| Equity in loss of joint ventures | <u>\$ --</u> | <u>\$ --</u> | <u>\$(8,715)</u> | <u>\$(8,715)</u> |
| Segment assets | \$ 129,568 | \$ 78,318 | \$134,698 | \$342,584 |
| Capital expenditures | 12,809 | 3,253 | -- | 16,062 |
| Depreciation expense | 7,285 | 3,611 | -- | 10,896 |

| | Equipment | Packaging Materials | Corporate, Other and Eliminations | Consolidated |
|--|-----------------------|------------------------|---|-----------------------|
| <u>Fiscal Year Ended September 30, 1997</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> | <u>Segment</u> |
| Net sales | \$391,721 | \$110,186 | \$ -- | \$501,907 |
| Cost of goods sold | 228,854 | 89,148 | -- | 318,002 |
| Gross profit | 162,867 | 21,038 | -- | 183,905 |
| Operating expenses | 97,143 | 21,029 | 8,070 | 126,242 |
| Income (loss) from operations | <u>\$ 65,724</u> | <u>\$ 9</u> | <u>\$(8,070)</u> | <u>\$ 57,663</u> |
| Equity in loss of joint ventures | <u>\$ --</u> | <u>\$ --</u> | <u>\$(6,701)</u> | <u>\$(6,701)</u> |
| Segment assets | \$159,124 | \$ 87,973 | \$ 129,722 | \$376,819 |
| Capital expenditures | 7,749 | 5,767 | -- | 13,516 |
| Depreciation expense | 5,977 | 2,968 | -- | 8,945 |

Intersegment sales are immaterial. Operating expenses identified as Corporate, Other and Eliminations consist entirely of corporate expenses. Assets identified as Corporate, Other and Eliminations consist of all cash and short-term investments of the Company and corporate income tax assets.

The Company's market for its products is worldwide. The table below presents destination sales to unaffiliated customers and long-lived assets by country:

| <u>Fiscal year ended September 30, 1999</u> | <u>Destination Sales</u> | <u>Long-Lived Assets</u> |
|--|-------------------------------------|-------------------------------------|
| Taiwan | \$93,317 | \$ 606 |
| United States | 69,353 | 230,337 |
| Singapore | 44,642 | 48,653 |
| Philippines | 42,607 | 656 |
| Malaysia | 40,172 | 127 |
| Japan | 19,262 | 13,738 |
| Hong Kong | 19,096 | 4,875 |
| Israel | 1,007 | 20,300 |
| All other | 69,461 | 5,503 |
| | <u>\$398,917</u> | <u>\$324,795</u> |

| <u>Fiscal year ended September 30, 1998</u> | <u>Destination Sales</u> | <u>Long-Lived Assets</u> |
|--|-------------------------------------|-------------------------------------|
| Taiwan | \$82,957 | \$ 660 |
| United States | 82,053 | 123,308 |
| Philippines | 70,675 | 796 |
| Malaysia | 63,817 | 149 |
| Singapore | 18,932 | 39,095 |
| Korea | 15,205 | 309 |
| Hong Kong(1) | 14,815 | 6,863 |
| Israel | 1,397 | 24,834 |
| All other | 61,189 | 11,872 |
| | <u>\$411,040</u> | <u>\$207,886</u> |

(1) The reduction in assets from \$44,526 in fiscal 1997 to \$6,863 in fiscal 1998 was due to lower accounts receivable resulting from the centralization of the Company's invoicing practices, for equipment sales, to the US.

| <u>Fiscal year ended September 30, 1997</u> | <u>Destination Sales</u> | <u>Long-Lived Assets</u> |
|--|-------------------------------------|-------------------------------------|
| Taiwan | \$109,822 | \$ 424 |
| Korea | 97,370 | 185 |
| United States | 74,817 | 122,061 |
| Malaysia | 66,231 | 127 |
| Philippines | 39,435 | - |
| Singapore | 26,825 | 42,762 |
| Hong Kong | 13,990 | 44,526 |
| Israel | 731 | 25,872 |
| All other | 72,686 | 11,140 |
| | <u>\$501,907</u> | <u>\$247,097</u> |

Sales to a relatively small number of customers account for a significant percentage of the Company's net sales. In fiscal 1999 no customer accounted for more than 10% of total net sales but in fiscal 1998, sales to Intel accounted for 17.6% of the Company's net sales and in fiscal 1997, sales to Anam (a Korea-based customer) and Intel accounted for approximately 12.5% and 10.2%, respectively, of net sales. The Company expects that sales of its products to a limited number of customers will continue to account for a high percentage of net sales for the foreseeable future.

NOTE 12: OTHER FINANCIAL DATA

In July 1998, the Company decided to discontinue the manufacture and sale of a line of products acquired in July 1994 from Assembly Technologies. As a consequence, no future cash flows from this product line were anticipated and \$948 of goodwill arising from this acquisition was written off in the Company's fiscal 1998 fourth quarter, in accordance with the provisions of SFAS 121.

Maintenance and repairs expense totaled \$2,551, \$3,582 and \$4,316 for fiscal 1999, 1998 and 1997, respectively. Warranty and retrofit expense was \$4,586, \$4,796 and \$5,788 for fiscal 1999, 1998 and 1997, respectively.

Rent expense for fiscal 1999, 1998 and 1997 was \$3,216, \$2,997 and \$3,191, respectively.

A reconciliation of weighted average shares outstanding-basic to the weighted average shares outstanding-diluted appears below:

| | (Shares in thousands) | | |
|---|---------------------------------|---------------|---------------|
| | Fiscal Year Ended September 30, | | |
| | 1999 | 1998 | 1997 |
| Weighted average shares outstanding - Basic | 23,423 | 23,301 | 20,871 |
| Potentially dilutive securities: | | | |
| Employee stock options | * | * | 557 |
| Weighted average shares outstanding - Diluted | <u>23,423</u> | <u>23,301</u> | <u>21,428</u> |

* Due to the Company's net loss for the fiscal years ended September 30, 1999 and September 30, 1998, all potentially dilutive securities are deemed to be antidilutive. The weighted average number of shares for potentially dilutive securities (employee and director stock options) was 666,000 in fiscal 1999 and 366,000 in fiscal 1998.

NOTE 13: COMMITMENTS AND CONTINGENCIES

The Company has obligations under various operating leases, primarily for manufacturing and office facilities, which expire periodically through 2006. Minimum rental commitments under these leases (excluding taxes, insurance, maintenance and repairs, which are also paid by the Company), are as follows: \$3,970 in 2000; \$3,107 in 2001; \$2,642 in 2002; \$1,376 in 2003; \$1,237 in 2004 and \$2,312 thereafter.

The Company entered into a joint venture agreement, in September 1998, to develop, manufacture and market advanced polymer materials for semiconductor and microelectronic packaging end users. The Company has invested approximately \$3,800 in this joint venture and has committed to invest an additional \$2,200.

From time to time, third parties assert that the Company is, or may be, infringing or misappropriating their intellectual property rights. In such cases, the Company will defend against claims or negotiate licenses where considered appropriate. In addition, certain of the Company's customers have received notices of infringement from the Lemelson Medical, Education and Research Foundation Limited Partnership (the "Lemelson Foundation"), alleging that equipment supplied by the Company, and processes performed by such equipment, infringe on patents held by the Lemelson Foundation. This activity increased substantially in 1998, the year in which the Lemelson Foundation settled its suit against the Ford Motor Company, and entered into License Agreements with Ford, GM and Chrysler. Since the settlement a number of the Company's customers, including Intel, have been sued by the Lemelson Foundation. Certain customers have requested that the Company defend and indemnify them against the claims of the Lemelson Foundation or to contribute to any settlement the customer reaches with the Lemelson Foundation. The Company has received opinions from its outside patent counsel with respect to certain of the Lemelson Foundation patents. The Company is not aware that any equipment marketed by the Company, or process performed by such equipment, infringe on the Lemelson Foundation patents in question and does not believe that the Lemelson Foundation matter or any other pending intellectual property claim will have a material adverse effect on its business, financial condition, operating results or cash flows. However, the ultimate outcome of any infringement or misappropriation claim affecting the Company is uncertain, and there can be no assurances that the resolution of these matters will not have a material adverse effect on the Company's business, financial condition, operating results or cash flows.

The Israeli government has funded a portion of the research and development costs related to certain products. The Company is contingently liable to repay such funding through royalties to the Israeli government. Royalty

payments are due only upon sale of the funded products, are computed at varying rates from 2% to 5% of such sales and are limited to the amounts received from the Israeli government. Royalty payments to the Israeli government for the fiscal years ended September 30, 1999, 1998 and 1997 totaled \$4, \$286 and \$148, respectively. At September 30, 1999, the Company was contingently liable for royalties approximating \$2,302 related to potential future product sales.

The Company is obligated, under a foreign exchange contract, to purchase 1,600 Swiss Francs in March 2000 for \$1,079. Based on the year-end exchange rate the fair value of the obligation approximates the contract value.

The U.S. Customs is currently conducting an assessment of the Company's compliance with Customs Regulations for the fiscal year ended September 30, 1998. Management believes that the ultimate outcome of this assessment will not materially and adversely affect the Company's business, financial condition, operating results or cash flows.

NOTE 14: SELECTED QUARTERLY FINANCIAL DATA (unaudited)

Financial information pertaining to quarterly results of operations follows:

| <u>Year ended</u> <u>September 30, 1999:</u> | <u>First</u> <u>Quarter</u> | <u>Second</u> <u>Quarter</u> | <u>Third</u> <u>Quarter</u> | <u>Fourth</u> <u>Quarter</u> | <u>Total</u> |
|--|--------------------------------|---------------------------------|--------------------------------|---------------------------------|-------------------|
| Net sales | \$61,175 | \$ 73,561 | \$110,806 | \$153,375 | \$398,917 |
| Gross profit | 16,176 | 21,025 | 30,374 | 45,960 | 113,535 |
| Income (loss) from operations (1)(3) | (10,282) | (17,087) | (776) | 8,413 | (19,732) |
| Income (loss) before minority interest and income taxes | (12,663) | (21,109) | (1,224) | 8,811 | (26,185) |
| Income tax expense (benefit) | (3,800) | (6,333) | (283) | 2,195 | (8,221) |
| Minority interest in net loss | -- | -- | 282 | 736 | 1,018 |
| Net income (loss) | <u>\$(8,863)</u> | <u>\$(14,776)</u> | <u>\$(659)</u> | <u>\$7,352</u> | <u>\$(16,946)</u> |
| Net income (loss) per share: | | | | | |
| Basic | \$ (0.38) | \$ (0.63) | \$ (0.03) | \$.31 | \$(0.72) |
| Diluted | \$ (0.38) | \$ (0.63) | \$ (0.03) | \$.30 | \$(0.72) |

| <u>Year ended</u> <u>September 30, 1998:</u> | <u>First</u> <u>Quarter</u> | <u>Second</u> <u>Quarter</u> | <u>Third</u> <u>Quarter</u> | <u>Fourth</u> <u>Quarter</u> | <u>Total</u> |
|---|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------------|
| Net sales | \$123,111 | \$120,060 | \$91,693 | \$ 76,176 | \$411,040 |
| Gross profit | 45,345 | 45,987 | 30,185 | 15,316 | 136,833 |
| Income (loss) from operations (2) (3) | 10,630 | 12,987 | (3,202) | (24,571) | (4,156) |
| Income (loss) before income taxes | \$ 9,748 | \$ 11,894 | \$ (4,222) | \$ (24,777) | \$ (7,357) |
| Income tax expense (benefit) | <u>2,924</u> | <u>2,703</u> | <u>(1,098)</u> | <u>(6,446)</u> | <u>(1,917)</u> |
| Net income (loss) | <u>\$ 6,824</u> | <u>\$ 9,191</u> | <u>\$(3,124)</u> | <u>\$(18,331)</u> | <u>\$(5,440)</u> |
| Net income (loss) per share: | | | | | |
| Basic | \$ 0.29 | \$ 0.39 | \$ (0.13) | \$ (0.79) | \$ (0.23) |
| Diluted | \$ 0.29 | \$ 0.39 | \$ (0.13) | \$ (0.79) | \$ (0.23) |

- (1) Results for the first quarter of fiscal 1999 include a charge of \$397 for severance in connection with the resizing of the Company's work-force begun in fiscal 1998. Results of the second quarter include a one-time charge of \$5,521 for severance and asset writeoff in connection with the move of ball bonder manufacturing to Singapore and a charge of \$3,935 for purchased in-process research and development in connection with the purchase of the X-LAM technology.

- (2) Results for the fourth quarter of fiscal 1998 include a charge of \$8,420 consisting of \$4,953 of severance, \$1,891 of product discontinuation costs, \$948 of goodwill writeoff and \$628 of other costs, in connection with the resizing of the Company's work force and product lines resulting from a slowdown in customer orders.
- (3) Represents net sales less costs and expenses but before net interest expense, equity in loss of joint ventures and other expense.

NOTE 15: SUBSEQUENT EVENT

On December 13, 1999, the Company issued \$150.0 million of convertible subordinated notes. On December 15, 1999 the Company issued an additional \$25.0 million of convertible subordinated notes in connection with the exercise of the initial purchasers' over-allotment option. The notes are general obligations of the Company and subordinated to all senior debt. The notes bear interest at 4 3/4%, are convertible into the Company's common stock at \$45.7993 per share and mature on December 15, 2006. There are no financial covenants associated with the notes and there are no restrictions on paying dividends, incurring additional debt or issuing or repurchasing the Company's securities. Interest on the notes will be paid on June 15 and December 15 of each year beginning June 15, 2000. The Company may redeem the notes in whole or in part at any time after December 18, 2002 at prices ranging from 102.714% at December 19, 2002 to 100.0% at December 15, 2006.

Report of Independent Accountants

To the Members of Flip Chip Technologies, LLC:

In our opinion, the accompanying balance sheet and the related statements of operations, members' equity and of cash flows present fairly, in all material respects, the financial position of Flip Chip Technologies, LLC at September 30, 1999, and the results of its operations and its cash flows for the year ended September 30, 1999 in conformity with accounting principles generally accepted in the United States. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for the opinion expressed above.

PricewaterhouseCoopers LLP

Philadelphia, Pennsylvania
December 6, 1999

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Flip Chip Technologies, LLC:

We have audited the accompanying balance sheet of FLIP CHIP TECHNOLOGIES, LLC (the Company; a Delaware limited liability company) as of September 30, 1998, and the related statements of operations, members' equity and cash flows for each of the two years in the period ended September 30, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Flip Chip Technologies, LLC at September 30, 1998, and the results of its operations and its cash flows for each of the two years in the period ended September 30, 1998, in conformity with generally accepted accounting principles.

ARTHUR ANDERSEN LLP

Phoenix, Arizona,
November 19, 1998

Flip Chip Technologies, LLC
Balance Sheets
September 30, 1999 and 1998

| | 1999 | 1998 |
|---|----------------------|---------------------|
| Assets | | |
| Current Assets: | | |
| Cash and cash equivalents | \$ 839,122 | \$ 1,269,566 |
| Accounts receivable (net of allowance for bad debts of \$14,309 in 1999 and \$0 in 1998) | 2,483,074 | 1,052,161 |
| Due from Member | - | 58,583 |
| Materials inventory | 67,140 | 89,091 |
| Deposits | 200,667 | 91,200 |
| Prepaid expenses | <u>121,236</u> | <u>35,464</u> |
| Total current assets | 3,711,239 | 2,596,065 |
| Property and equipment, net | 20,843,846 | 22,317,827 |
| Deposits | <u>390,470</u> | <u>680,603</u> |
| | <u>\$ 24,945,555</u> | <u>\$25,594,495</u> |
| Liabilities and Members' Equity | | |
| Current Liabilities | | |
| Accounts payable | \$ 2,042,123 | \$ 1,721,686 |
| Accrued compensation and related taxes | 559,827 | 742,438 |
| Accrued interest | 151,962 | 559,966 |
| Other accrued expenses | 1,760,984 | 511,249 |
| Due to members | 332,118 | - |
| Notes payable to members, current portion | <u>1,025,805</u> | <u>5,000,000</u> |
| Total current liabilities | 5,872,819 | 8,535,339 |
| Accrued interest | - | 757,423 |
| Notes payable to members, net of current portion | <u>-</u> | <u>15,478,142</u> |
| Total liabilities | 5,872,819 | 24,770,904 |
| Commitments and contingencies | | |
| Members' Equity | | |
| Members' contributions | 65,832,294 | 33,000,000 |
| Accumulated deficit | <u>(46,759,558)</u> | <u>(32,176,409)</u> |
| Total members' equity | <u>19,072,736</u> | <u>823,591</u> |
| | <u>\$ 24,945,555</u> | <u>\$25,594,495</u> |

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

Flip Chip Technologies, LLC
Statements of Operations
For the Years Ended September 30, 1999, 1998 and 1997

| | 1999 | 1998 | 1997 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Wafer processing and engineering | \$ 12,853,027 | \$ 4,342,133 | \$ 887,332 |
| Licensing | <u>1,000,000</u> | <u>-</u> | <u>-</u> |
| Net revenues | 13,853,027 | 4,342,133 | 887,332 |
| Cost of wafer processing, engineering and licensing | <u>19,379,453</u> | <u>15,409,290</u> | <u>9,264,540</u> |
| Gross margin | (5,526,426) | (11,067,157) | (8,377,208) |
| Operating expenses: | | | |
| Research and development | 709,159 | 530,816 | 507,467 |
| Sales and marketing | 3,168,417 | 2,524,974 | 2,574,042 |
| General and administrative | 3,149,922 | 1,805,229 | 1,735,161 |
| Resizing expense | <u>475,000</u> | <u>-</u> | <u>-</u> |
| | 7,502,498 | 4,861,019 | 4,816,670 |
| Loss from operations | (13,028,924) | (15,928,176) | (13,193,878) |
| Other income (expense) | | | |
| Interest income | 112,643 | 55,865 | 118,095 |
| Other income | - | 53,023 | - |
| Interest expense | <u>(1,666,868)</u> | <u>(1,268,118)</u> | <u>(63,685)</u> |
| | <u>(1,554,225)</u> | <u>(1,159,230)</u> | <u>54,410</u> |
| Net loss | <u><u>\$ (14,583,149)</u></u> | <u><u>\$ (17,087,406)</u></u> | <u><u>\$ (13,139,468)</u></u> |

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

Flip Chip Technologies, LLC
Statements of Members' Equity
For the Years Ended September 30, 1999, 1998 and 1997

| | Members' | Accumulated | |
|---|----------------------|------------------------|----------------------|
| | Contributions | Deficit | Total |
| Balance, September 30, 1996 | \$ 5,000,000 | \$ (1,949,535) | \$ 3,050,465 |
| Cash contributions | 28,000,000 | - | 28,000,000 |
| Net loss | <u>-</u> | <u>(13,139,468)</u> | <u>(13,139,468)</u> |
| Balance, September 30, 1997 | 33,000,000 | (15,089,003) | 17,910,997 |
| Net loss | <u>-</u> | <u>(17,087,406)</u> | <u>(17,087,406)</u> |
| Balance, September 30, 1998 | 33,000,000 | (32,176,409) | 823,591 |
| Conversion of member notes and interest | 32,832,294 | - | 32,832,294 |
| Net loss | <u>-</u> | <u>(14,583,149)</u> | <u>(14,583,149)</u> |
| Balance, September 30, 1999 | <u>\$ 65,832,294</u> | <u>\$ (46,759,558)</u> | <u>\$ 19,072,736</u> |

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

Flip Chip Technologies, LLC
Statement of Cash Flows
For the Years Ended September 30, 1999, 1998 and 1997

| | 1999 | 1998 | 1997 |
|--|--------------------|---------------------|---------------------|
| Cash flows from operating activities: | | | |
| Net Loss | \$(14,583,149) | \$(17,087,406) | \$(13,139,468) |
| Adjustments to reconcile net loss to cash used in operating activities: | | | |
| Depreciation and amortization | 4,698,451 | 3,964,021 | 2,146,314 |
| Interest expense converted to equity | 1,572,290 | - | - |
| Provision for doubtful accounts | 14,309 | - | - |
| Changes in assets and liabilities: | | | |
| Accounts receivable | (1,445,222) | (753,342) | (231,176) |
| Due from Members | 58,583 | (58,583) | - |
| Materials inventory | 21,951 | (26,515) | (62,576) |
| Prepaid expenses | (85,772) | 3,454 | (9,706) |
| Deposits | 180,666 | (339,265) | (229,038) |
| Accounts payable | 320,437 | 916,468 | 89,979 |
| Accrued compensation and related costs | (182,611) | (136,063) | 714,588 |
| Accrued interest | 94,577 | 1,257,389 | 60,000 |
| Other accrued expenses | 1,249,735 | 284,172 | 208,798 |
| Due to members | 332,118 | (726,231) | 564,333 |
| Accrued construction costs | - | - | (2,504,737) |
| Net cash used in operating activities | <u>(7,753,637)</u> | <u>(12,701,901)</u> | <u>(12,392,689)</u> |
| Cash flows from investing activities: | | | |
| Purchase of fixed assets | <u>(3,224,470)</u> | <u>(3,330,474)</u> | <u>(20,433,227)</u> |
| Net cash used in investing activities | <u>(3,224,470)</u> | <u>(3,330,474)</u> | <u>(20,433,227)</u> |
| Cash flows from financing activities: | | | |
| Member contributions | - | - | 28,000,000 |
| Member loans | <u>10,547,663</u> | <u>15,478,142</u> | <u>5,000,000</u> |
| Net cash provided by investing activities | <u>10,547,663</u> | <u>15,478,142</u> | <u>33,000,000</u> |
| Net increase (decrease) in cash and cash equivalents | (430,444) | (554,233) | 174,084 |
| Cash and cash equivalents, beginning of year | <u>1,269,566</u> | <u>1,823,799</u> | <u>1,649,715</u> |
| Cash and cash equivalents, end of year | <u>\$ 839,122</u> | <u>\$ 1,269,566</u> | <u>\$ 1,823,799</u> |
| Supplemental disclosures of cash flow information and non cash financing activities: | | | |
| Cash paid during the year for interest | \$ - | \$ 10,730 | \$ - |
| Conversion of Member notes and interest | 32,832,294 | - | - |

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

NOTES TO FINANCIAL STATEMENTS

1. Nature of Operations:

Company Profile

Flip Chip Technologies, LLC (the "Company"), a Delaware limited liability company formed on February 28, 1996, operates under an operating agreement (the Operating Agreement) between members Delphi-Delco Electronics System ("Delco") and Kulicke & Soffa Holdings, Inc. ("K&S") as described in Note 4.

The Company entered into a technology transfer agreement (the Technology Transfer Agreement) with Delco which permits the Company to use and sublicense Delco's Flex-On-Cap bumping technology to provide wafer solder-bumping and related services. The Company's manufacturing facility and corporate offices are located in Phoenix, Arizona.

Commencement of Operations

The Company incurred significant expenses to commence manufacturing operations, which has resulted in an accumulated deficit of \$46,759,558 at September 30, 1999. The Company's forecast for the year ended September 30, 2000, indicates that additional funding will be needed to meet forecasted cash requirements. Management expects, and has obtained written representation indicating, that K&S will fund the Company's additional cash requirements.

Strategy

The markets for the Company's technology are presently served by many companies utilizing different wafer technologies which have significant investments in their respective technologies. The Company's operating results will depend to a significant extent on its ability to attract new customers to use the Company's wafer bumping and finishing technology. The Company provides wafer bumping and finishing services to customers and sublicenses the technology to those customers who desire to use the technology in-house. The Company believes that its technology will be accepted by a sufficient number of customers to sustain future profitable operations.

2. Summary of Significant Accounting Policies

Revenue Recognition

Revenue is recognized on the accrual basis after the wafer bumping process has been completed and the product has been shipped to the customer.

Licensing income is recognized as revenue in accordance with the specific terms of the licensing agreement.

Research and Development

The Company is involved with developing new wafer bumping technologies. In addition, Delco, under the Technology Transfer Agreement, is obligated to provide certain technologies to the Company. Expenses to develop new technology are included in research and development in the accompanying statements of operations.

Cash and Cash Equivalents

Cash equivalents consist of investments in a money market account. The cash equivalents are recorded at cost, which approximates market value of \$838,522 and \$1,163,325 at September 30, 1999 and 1998, respectively.

Materials Inventory

Materials inventory are recorded at cost and consist of raw materials used in the wafer bumping process. Materials are expensed on consumption during the wafer bumping process.

Significant Customers

One customer represented 30% and 26% of total revenue for the years ended September 30, 1999 and 1998, respectively, and 11% and 38% of total accounts receivable at September 30, 1999 and 1998, respectively. Another customer represented 27% of total revenue for the years ended September 30, 1999 and 1998, respectively, and 28% and 25% of total accounts receivable at September 30, 1999 and 1998, respectively.

Comprehensive Income

The Company has adopted SFAS No. 130 "Reporting Comprehensive Income." The Company's comprehensive loss for 1999, 1998 and 1997 is equal to its net loss as reported in the accompanying statements of operations.

Property and Equipment

Property, plant and equipment is recorded at cost and is depreciated using the straight-line method over the estimated useful lives of the respective assets, which range from three to five years for machinery and equipment. Building improvements consist of costs incurred related to the design and construction of leasehold improvements on the Company's manufacturing and corporate headquarters in Phoenix, Arizona. The improvements are being depreciated using the straight-line method over the initial term of the lease, which is ten years. Depreciation expense was \$4,698,451, \$3,964,021 and \$2,146,314 in fiscal years 1999, 1998 and 1997, respectively. When assets are retired or otherwise disposed of, the assets and related accumulated depreciation accounts are adjusted accordingly, and any resulting gain or loss is recorded in current operations.

Property and equipment consisted of the following at September 30:

| | 1999 | 1998 |
|--|----------------------|----------------------|
| Furniture, fixtures and computer equipment | \$ 680,322 | \$ 595,101 |
| Building improvements | 11,908,208 | 11,815,757 |
| Machinery and equipment | <u>19,068,349</u> | <u>16,021,551</u> |
| | 31,656,879 | 28,432,409 |
| Accumulated depreciation | <u>(10,813,033)</u> | <u>(6,114,582)</u> |
| | <u>\$ 20,843,846</u> | <u>\$ 22,317,827</u> |

In accordance with SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," the carrying value of long-lived assets is evaluated whenever changes in circumstances indicate the carrying amount of such assets may not be recoverable. In performing such review for recoverability, the Company compares the expected future cash flows to the carrying value of long-lived assets and identifiable intangibles. If the anticipated undiscounted future cash flows are less than the carrying amount of such assets, the Company recognizes an impairment loss for the difference between the carrying amount of the assets and their estimated fair value. If an asset being tested for recoverability was acquired in a business combination accounted for using the purchase method, the excess of cost over fair value of net assets that arose in that transaction is allocated to the assets being tested for recoverability on a pro rata basis using the relative fair values of the long-lived assets and identifiable intangibles acquired at the acquisition date. The Company has not identified any impairments as of September 30, 1999.

Fair Value of Financial Instruments

The carrying amounts of cash, cash equivalents, accounts receivable, accounts payable and accrued expenses are stated at cost, which approximates fair value, because of the short maturity of these financial instruments. The Company's long-term debt bears interest at average interest rates which approximate market rates at September 30, 1999.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Income Taxes

The Company, with the consent of its members, is a limited liability company which qualifies for tax treatment as a partnership for federal and state income tax purposes. As a result, the Company's results of operations are included in the income tax returns of its members. Therefore, the accompanying financial statements do not include any provisions for income taxes.

Derivative Instruments and Hedging Activities

In June 1998, Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133") was issued. SFAS 133 establishes accounting and reporting standards for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value. This Statement is effective for fiscal years commencing after June 15, 2000. Management does not believe that the adoption of SFAS 133 will have a material impact on the financial statements.

3. Notes Payable to Members

Through May 1999, the Company had entered into four separate loan agreements with K&S. The Company had borrowed \$30 million under these agreements. On May 31, 1999, K&S converted these loans and accrued interest of \$2,832,294 to capital contributions based upon the fair market value of the Company, as determined by independent appraisers pursuant to the Loan Agreements and the Operating Agreement.

In February 1998, the Company entered into a loan agreement with Delco, pursuant to which Delco will continue to provide and perform ongoing engineering support services in accordance with the Technology Transfer Agreement. The amount owed to Delco for past engineering support costs as of the agreement date was included in this loan agreement. Subsequent billings for engineering support services through May 31, 1999 have been added to the loan amount. The note carries an interest rate of prime (8.25% as of September 30, 1999) plus 1.5%. The loan's principal and accrued interest balances as of September 30, 1999, are \$1,025,805 and \$151,962, respectively. Delco has the option to convert this note plus accrued interest to a capital contribution, but on July 14, 1999 requested that this loan and its related interest be paid in full. The Company is presently in default of this loan as it has not repaid this loan or any of the related accrued interest, as a result the note is classified as a current liability at September 30, 1999.

4. Operating Agreement

As stated above, the Company operates under the Operating Agreement, which was entered into on February 28, 1996, between Delco and K&S. The Company registered in Delaware as a limited liability company to obtain a license to use technology and to engage in the business of providing wafer bumping services and licensing or sublicensing technology related to such services.

K&S and Delco had made initial capital contributions of \$16,830,000 and \$16,170,000, respectively. During 1999, K&S converted its notes payable and related accrued interest of \$32,832,294 into equity units. The ownership units, associated with the conversion, were based upon the fair market value of the Company determined by an independent appraisal.

The members have agreed not to compete with the Company while being a member of the Company or for a period of 24 months thereafter.

The Company shall continue until such time of dissolution. Dissolution will occur upon the following: the agreement of both Members to dissolve and terminate the Company; the sale, abandonment or other disposition of all or substantially all of the assets of the Company; or the dissociation of any Member unless the remaining Member elects to continue the business.

5. Technology Transfer Agreement

On February 28, 1996, the Company entered into the Technology Transfer Agreement with Delco, allowing

the Company to use and sublicense Flex-On-Cap (FOC) technology owned by Delco. The Technology Transfer Agreement also gives the Company exclusive rights to future bumping technology developed by Delco.

For a period of up to five years, Delco shall provide ongoing engineering support, at the request of the Company, in accordance with the terms in the Technology Transfer Agreement.

The Company pays a royalty to Delco through February 27, 2001 equal to 10% of gross profit, as defined in the Technology Transfer Agreement, derived from the sale, service or transfer of licensed products made using the existing FOC technology and technological improvements. Thereafter, the royalty rate shall be decreased by 1% annually for each succeeding year through February 27, 2006. Beginning February 27, 2006, no further royalty shall be due.

Sublicensing profit is divided between Delco and the Company. Delco receives 30% of the profit, as defined by the technology Transfer Agreement, and the Company retains the remaining 70%.

6. Stock Option Plan

There is a stock option plan for officers and key employees pursuant to which options to purchase Kulicke and Soffa Industries, Inc common stock have been or may be granted at 100% of the market price of Kulicke and Soffa Industries, Inc. common stock on the date of the grant. Options granted under the Employee Plans are exercisable at such dates as are determined in connection with their issuance, but not later than ten years after the date of grant. Effective September 28, 1999, the Company's officers and key employees participated in the plan.

The following summarizes employee stock option activity for the year ended September 30, 1999:

| | <u>September 30, 1999</u> | |
|--|------------------------------|-------------------------------|
| | Options | Average Exercise Price |
| | (Share amounts in thousands) | |
| Options outstanding at beginning of period | - | N/A |
| Granted | 29 | 25.88 |
| Exercised | - | N/A |
| Terminated or canceled | <u>-</u> | N/A |
| Options outstanding at end of period | <u>29</u> | 25.88 |
| Options exercisable at end of period | <u>-</u> | N/A |

The following table summarizes information concerning currently outstanding and exercisable options at September 30, 1999:

| Options Outstanding | | | Options Exercisable | | |
|-------------------------------------|---------------------------|--|--|---------------------------|--|
| (Share amounts in thousands) | | | (Share amounts in thousands) | | |
| Range of Exercise Prices | Number Outstanding | Weighted Average Remaining Contractual Life | Weighted Average Exercise Price | Number Exercisable | Weighted Average Exercise Price |
| \$ 25.88 | 29 | 10 | \$ 25.88 | - | N/A |

As permitted under Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), the Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), in accounting for stock options granted to employees. Under APB 25, the Company generally recognizes no compensation expense in the statements of operations with respect to such grants.

Unaudited pro forma information regarding net income (loss) and earnings (loss) per share is required by SFAS 123 for options granted after October 1, 1995 as if the Company had accounted for the stock option grants to employees under the fair value method of SFAS 123. The fair value of the Company's stock option grants to employees was estimated using a Black-Scholes option pricing model.

The following assumptions were employed to estimate the fair value of stock options granted to employees:

| | Fiscal Year Ended September 30, 1999 |
|---------------------------------|---|
| Expected dividend yield | \$ - |
| Expected stock price volatility | 74.00% |
| Risk-free interest rate | 5.84% |
| Expected life (years) | 8 |

For pro forma purposes, the estimated fair value of the Kulicke and Soffa Industries, Inc. stock options to employees is amortized over the options' vesting period. The Company's pro forma information follows:

| | Fiscal Year Ended September 30, 1999 |
|--|---|
| Weighted average fair value of options granted | \$ 19.92 |
| Net loss - as reported | (14,583,149) |
| Net loss - unaudited pro forma | (14,583,743) |

7. Related Party Transactions

The Company incurred the following costs to Delco and K&S:

| | 1999 | 1998 | 1997 |
|--|-------------------|-------------------|---------------------|
| Delco | | | |
| Salaries and burden | \$ - | \$ - | \$ 145,177 |
| Royalty | 270,000 | - | - |
| Equipment cancellation fees | - | - | 243,662 |
| Engineering and development support | 65,981 | 93,979 | 214,801 |
| Materials, qualification and other costs | 109,193 | 151,606 | 142,650 |
| Manufacturing services | - | 34,508 | 289,477 |
| | <u>\$ 445,174</u> | <u>\$ 280,093</u> | <u>\$ 1,035,767</u> |
| K&S | | | |
| Marketing expenses | <u>\$ 20,000</u> | <u>\$ -</u> | <u>\$ -</u> |

The Company had the following related party receivables and payables at September 30, 1999 and 1998:

| | 1999 | 1998 |
|----------------|---------|-----------|
| Sales to Delco | \$ - | \$ 72,144 |
| Due from Delco | - | 58,583 |
| Due to Delco | 312,118 | - |
| Due to K&S | 20,000 | - |

8. Commitments and Contingencies

Commitments

In December 1996, the Company entered into an agreement to purchase water treatment services for its wafer processing facility. The term of the agreement is ten years from March 1997. The base water service fee is approximately \$35,000 per month, adjusted annually based on the producer price index-commodities for materials, supplies and labor.

The Company has a ten year agreement to purchase nitrogen through March 2007, and is renewable for an additional five years. The base facility charge is approximately \$15,000 per month, adjusted annually for increases in labor and utility costs.

Effective October 1996, the Company entered into a ten year agreement for information technology services. The agreement provides for the hardware, software and human resources to implement and support the information technology needs of the manufacturing facility. The current base charge is approximately \$110,000 per month, adjusted annually based on the consumer price index.

Operating Leases

The Company has entered into a lease agreement to occupy its manufacturing and corporate headquarters facility. In addition, the Company leases manufacturing and other equipment. Operating lease expense for the periods ended September 30, 1999, 1998 and 1997 was approximately \$994,000, \$909,000 and \$612,000, respectively. At September 30, 1999, future minimum rental commitments under the noncancelable operating lease obligations are as follows:

| Year Ending September 30, | |
|--------------------------------------|---------------------|
| 2000 | \$ 744,983 |
| 2001 | 673,828 |
| 2002 | 553,629 |
| 2003 | 361,482 |
| 2004 | 372,326 |
| Thereafter | <u>778,498</u> |
| Total future minimum lease payments | <u>\$ 3,484,746</u> |

Litigation

In the normal course of its business, the Company is subject to certain contractual guarantees and litigation. In management's opinion, upon consultation with legal counsel, there is no current litigation which will have a material adverse effect on the Company's business, financial condition and operating results.

9. Employee Benefit Plan

Substantially all employees of the Company are covered by a qualified 401(k) plan. The plan is funded by voluntary employee contributions with the Company matching 50% of employee contributions up to 6% of employee contributions. For the years ended September 30, 1999, 1998 and 1997, the Company's matching contribution was approximately \$137,000, \$103,000 and \$53,000, respectively.

10. Resizing

In April 1999, the Company executed a resizing plan to align its workforce with current market conditions and reduce costs. Under the plan, 21 employees were involuntarily terminated. Severance and benefits totaling \$475,000 were paid to the employees in the year ended September 30, 1999. No amounts remained accrued at September 30, 1999.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

Information required hereunder with respect to the directors will appear under the heading "ELECTION OF DIRECTORS" in the Company's Proxy Statement for the 2000 Annual Meeting, which information is incorporated herein by reference.

The information required by Item 401(b) of Regulation S-K appears at the end of Part I, Item 1 of this report under the heading "Executive Officers of the Company."

Item 11. EXECUTIVE COMPENSATION.

The information required hereunder will appear under the heading "ADDITIONAL INFORMATION" in the Company's Proxy Statement for the 2000 Annual Meeting, which information is incorporated herein by reference.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The information required hereunder will appear under the heading "ELECTION OF DIRECTORS" in the Company's Proxy Statement for the 2000 Annual Meeting, which information is incorporated herein by reference.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information required hereunder will appear under the heading "ADDITIONAL INFORMATION" in the Company's Proxy Statement for the 2000 Annual Meeting, which information is incorporated herein by reference.

PART IV

Item 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K.

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

(1)(a) Financial Statements - Kulicke and Soffa Industries, Inc.:

| | |
|--|---------|
| Report of Independent Accountants | 29 |
| Consolidated Balance Sheet at September 30, 1999 and 1998 | 30 |
| Consolidated Statement of Operations for the fiscal years ended September 30, 1999, 1998 and 1997 | 31 |
| Consolidated Statement of Cash Flows for the fiscal years ended September 30, 1999, 1998 and 1997 | 32 |
| Consolidated Statement of Changes in Shareholders' Equity for the fiscal years ended September 30, 1999, 1998 and 1997 | 33 |
| Notes to Consolidated Financial Statements | 34 - 50 |

(b) Financial Statements - Flip Chip Technologies, LLC:

| | |
|---|---------|
| Report of Independent Accountants | 51 |
| Report of Independent Public Accountants | 52 |
| Balance Sheets at September 30, 1999 and 1998 | 53 |
| Statements of Operations for the years ended September 30, 1999, 1998 and 1997 | 54 |
| Statements of Members' Equity for the years ended September 30, 1999, 1998 and 1997 | 55 |
| Statements of Cash Flows for the years ended September 30, 1999, 1998 and 1997 | 56 |
| Notes to Financial Statements | 57 - 63 |

(2) Financial Statement Schedules:

| | |
|--|----|
| II - Valuation and Qualifying Accounts | 68 |
|--|----|

All other schedules are omitted because they are not applicable or the required information is shown the financial statements or notes thereto.

(3) Exhibits:

| EXHIBIT NUMBER | ITEM |
|----------------|---|
| 2.1(a) | Agreement and Plan of Acquisition dated September 14, 1995, between the Company, Circle "S" Industries, Inc. and Certain Stockholders of Circle "S" Industries, Inc., filed as Exhibit 2.1(a) to the Company's Form 8-K dated October 2, 1995, is incorporated herein by reference. |
| 2.1(b) | Agreement and Plan of Merger dated October 2, 1995, between the Company, Kulicke and Soffa Acquisition Corporation and Circle "S" Industries, Inc., filed as Exhibit 2.1(b) to the Company's Form 8-K dated October 2, 1995, is incorporated herein by reference. |
| 2.1(c) | Escrow Agreement dated October 2, 1995, between the Company, Larry D. Striplin, Jr. and Mellon Bank, N.A., filed as Exhibit 2.1(c) to the Company's Form 8-K dated October 2, 1995, is incorporated herein by reference. |

- 3(i) The Company's Amended and Restated Articles of Incorporation as of March 3, 1998, filed as Exhibit 3(i) to the Company's quarterly report on Form 10-Q for the quarterly period ended March 31, 1998 and Form of Amendment of Articles of Incorporation effective March 12, 1999, filed as Exhibit 3(i), to the Company's quarterly report on Form 10-Q for the quarterly period ended March 31, 1999, are incorporated herein by reference.
- 3(ii) The Company's By-Laws, as amended through June 26, 1990, filed as Exhibit 2.2 to the Company's Form 8-A12G dated September 8, 1995, is incorporated herein by reference.
- 4(i) Amended and Restated Loan Agreement between the Company and PNC Bank, N.A. dated March 26, 1998, filed as Exhibit 10(a) to the Company's quarterly report on Form 10-Q for the quarterly period ended March 31, 1998, is incorporated herein by reference.
- 4(ii) Indenture dated as of December 13, 1999 between the Company and Chase Manhattan Trust Company, National Association, as Trustee, filed as Exhibit 4.1 to the Company's Form 8-K dated December 13, 1999, is incorporated herein by reference.
- 4(iii) Registration Rights Agreement dated as of December 13, 1999 between the Company and Morgan Stanley & Co. Incorporated, filed as Exhibit 4.2 to the Company's Form 8-K dated December 13, 1999, is incorporated herein by reference.
- 10(i) Form of Termination of Employment Agreement signed by Mr. Kulicke (Section 2(a) - 30 months), and Messrs. Perchick, Sprague, Von Seggern, Jacobi, Wagner, DeSouza, Fuhovden, Lendner, Leonhardt, May, Salmons, Sawachi, Spooner, Wolf, Belani, Chylak, Cristallo, Greenberger, Oscilowski and Torton (Section 2(a) - 18 months), filed as Exhibit 10(vii) to the Company's quarterly report on Form 10-Q for the quarterly period ended March 31, 1998, is incorporated herein by reference.*
- 10(ii) Agreement between the Company and Frederick W. Kulicke, Jr., filed as Exhibit 10(iii) to Company's Annual Report on Form 10-K for the year ended September 30, 1989, is incorporated herein by reference.*
- 10(iii) The Company's 1980 Employee Incentive Stock Option Plan, filed as Exhibit 10(iv) to the Company's Annual Report on Form 10-K for the year ended September 30, 1989, is incorporated herein by reference.*
- 10(iv) The Company's 1983 Employee Incentive Stock Option Plan, filed as Exhibit 10(v) to the Company's Annual Report on Form 10-K for the year ended September 30, 1989, is incorporated herein by reference.*
- 10(v) The Company's 1988 Employee Incentive Stock Option and Non-Qualified Stock Option Plan (as amended and restated effective October 8, 1996) filed as Exhibit 10(vi) to the Company's Annual Report on Form 10-K for the year ended September 30, 1996, is incorporated herein by reference.*
- 10(vi) The Company's 1988 Non-Qualified Stock Option Plan for Non-Officer Directors (as amended and restated effective February 9, 1999).*
- 10(vii) The Company's 1994 Employee Incentive Stock Option and Non-Qualified Stock Option Plan (as amended and restated effective October 8, 1996), filed as Exhibit 10(viii) to the Company's Annual Report on Form 10-K for the year ended September 30, 1996, is incorporated herein by reference.*
- 10(viii) The Company's 1997 Non-Qualified Stock Option Plan for Non-Employee Directors (as amended and restated effective February 9, 1999).*
- 10(ix) The Company's Executive Incentive Compensation Plan, As Amended Through October 14, 1997, filed as Exhibit 10(ix) to the Company's Annual Report on Form 10-K for the year ended September 30, 1997, is incorporated herein by reference.*

- 10(x) Gold Supply Agreement, as amended October 2, 1995 between American Fine Wire Corporation, et al, and Rothschild Australia Limited, filed as Exhibit 10.1 to the Company's Form 8-K dated September 14, 1995 as amended by Form 8-K/A on October 26, 1995, is incorporated herein by reference.
- 10(xi) Agreement of Employment between Circle "S" Industries, Inc. and Larry D. Striplin, Jr. dated January 2, 1990, filed as Exhibit 10 (xiii) to the Company's Annual Report on Form 10-K for the year ended September 30, 1995, is incorporated herein by reference.*
- 10(xii) Amendment No. 1 to Agreement of Employment between Circle "S" Industries, Inc. and Larry D. Striplin, Jr. dated May 1, 1995, filed as Exhibit 10 (xiv) to the Company's Annual Report on Form 10-K for the year ended September 30, 1995, is incorporated herein by reference.*
- 10(xiii) Agreement between Circle "S" Industries, Inc. and Larry D. Striplin, Jr. dated September 30, 1995, filed as Exhibit 10 (xv) to the Company's Annual Report on Form 10-K for the year ended September 30, 1995, is incorporated herein by reference.*
- 10(xiv) The Company's Executive Deferred Compensation Plan (As Amended and restated Effective October 1, 1999).*
- 10(xv) Operating Agreement of Flip Chip Technologies, LLC dated February 28, 1996, filed as Exhibit 10 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 1996, is incorporated herein by reference.
- 10(xvi) Convertible Loan Agreements between the Company, Flip Chip Technologies, LLC and Delco Electronics Corporation dated June 16, 1997, October 30, 1997, February 18, 1998 and November 19, 1998 filed as Exhibit 10(xviii) to the Company's Annual Report on Form 10-K for the year ended September 30, 1998, is incorporated herein by reference.
- 10(xvii) The Company's 1998 Employee Incentive Stock Option and Non-Qualified Stock Option Plan filed as Exhibit 10(a) to the Company's quarterly report on Form 10-Q for the quarterly period ended March 31, 1999, is incorporated herein by reference.*
- 10(xviii) Amendment No. 1 to the Company's 1998 Employee Incentive Stock Option and Non-Qualified Stock Option Plan.*
- 10(xix) Amendment No. 1 to the Company's 1994 Employee Incentive Stock Option and Non-Qualified Stock Option Plan (as amended and restated effective October 8, 1996).*
- 10(xx) Amendment No. 1 to the Company's 1988 Employee Incentive Stock Option and Non-Qualified Stock Option Plan (as amended and restated effective October 8, 1996).*

21 Subsidiaries of the Company.

23.1 Consent of PricewaterhouseCoopers LLP (Independent Accountants).

23.2 Consent of PricewaterhouseCoopers LLP (Independent Accountants).

23.3 Consent of Arthur Andersen LLP (Independent Public Accountants).

27 Financial Data Schedule.

* Indicates a Management Contract or Compensatory Plan.

(b) Reports on Form 8-K:

None

KULICKE AND SOFFA INDUSTRIES, INC.
Schedule II-Valuation and Qualifying Accounts
(in thousands)

| <u>Description</u> | <u>Balance at beginning of period</u> | <u>Charged to costs and expenses</u> | <u>Charged to other accounts- describe</u> | <u>Deductions- describe</u> | <u>Balance at end of period</u> |
|---|---|--|--|---------------------------------|---|
| <u>Year ended September 30, 1997</u> | | | | | |
| Allowance for doubtful accounts | <u>\$ 1,227</u> | <u>\$ 1,065</u> | <u>\$ --</u> | <u>\$ 143(1)</u> | <u>\$ 2,149</u> |
| Inventory reserve | <u>\$ 11,755</u> | <u>\$ 2,593</u> | <u>\$ --</u> | <u>\$ 1,503(2)</u> | <u>\$12,845</u> |
| Valuation allowance for deferred taxes | <u>\$ 5,115</u> | <u>\$ 623(3)</u> | <u>\$ --</u> | <u>\$ 1,084(4)</u> | <u>\$ 4,654</u> |
| <u>Year ended September 30, 1998</u> | | | | | |
| Allowance for doubtful accounts | <u>\$ 2,149</u> | <u>\$ 29</u> | <u>\$ --</u> | <u>\$ 501(1)</u> | <u>\$ 1,677</u> |
| Inventory reserve | <u>\$ 12,845</u> | <u>\$ 4,132</u> | <u>\$ --</u> | <u>\$1,319(2)</u> | <u>\$15,658</u> |
| Valuation allowance for deferred taxes | <u>\$ 4,654</u> | <u>\$ 2,437(5)</u> | <u>\$ --</u> | <u>\$ --</u> | <u>\$ 7,091</u> |
| <u>Year ended September 30, 1999</u> | | | | | |
| Allowance for doubtful accounts | <u>\$ 1,677</u> | <u>\$ 812</u> | <u>\$ --</u> | <u>\$ 762(1)</u> | <u>\$ 1,727</u> |
| Inventory reserve | <u>\$ 15,658</u> | <u>\$ 1,200</u> | <u>\$ --</u> | <u>\$1,930(2)</u> | <u>\$14,928</u> |
| Valuation allowance for deferred taxes | <u>\$ 7,091</u> | <u>\$ 5,124(5)</u> | <u>\$ --</u> | <u>\$ --</u> | <u>\$12,215</u> |

(1) Bad debts written off.

(2) Disposal of excess and obsolete inventory.

(3) Reflects the increase in the valuation allowance associated with net operating losses of the Company's Japanese subsidiary.

(4) Reversal of the valuation allowance related to US tax credits.

(5) Reflects the increase in the valuation allowance associated with net operating losses of the Company's Japanese subsidiary plus an increase in the valuation allowance related to US tax credits.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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/ C. SCOTT KULICKE
C. Scott Kulicke
Chairman of the Board and
Chief Executive Officer

Dated: December 20, 1999

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this Report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--|---|-------------------|
| <u>/s/ C. SCOTT KULICKE</u> C. Scott Kulicke (Principal Executive Officer) | Chairman of the Board and Director | December 20, 1999 |
| <u>/s/ CLIFFORD G. SPRAGUE</u> Clifford G. Sprague (Principal Financial Officer) | Senior Vice President and Chief Financial Officer | December 20, 1999 |
| <u>/s/ JAMES W. BAGLEY</u> James W. Bagley | Director | December 20, 1999 |
| <u>/s/ FREDERICK W. KULICKE, JR.</u> Frederick W. Kulicke, Jr. | Director | December 20, 1999 |
| <u>/s/ JOHN A. O'STEEN</u> John A. O'Steen | Director | December 20, 1999 |
| <u>/s/ ALLISON F. PAGE</u> Allison F. Page | Director | December 20, 1999 |
| <u>/s/ MACDONELL ROEHM, JR.</u> MacDonell Roehm, Jr. | Director | December 20, 1999 |
| <u>/s/ LARRY D. STRIPLIN, JR.</u> Larry D. Striplin, Jr. | Director | December 20, 1999 |
| <u>/s/ C. WILLIAM ZADEL</u> C. William Zadel | Director | December 20, 1999 |

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BIOGRAPHIES

C. Scott Kulicke
Chairman of the Board
Chief Executive Officer
October 1984

President, Chief Executive Officer, 1979
General Manager, 1977
Vice President, 1976
Product Manager, Director, 1975
International Marketing Manager, 1973
Manager, Far East Operations, 1973

Other:
BS, Economics
Warton School
University of Pennsylvania

Morton K. Perchick
Executive Vice President
July 1995

President, Chairman of the Board
Kulicke & Soffa (Israel) Ltd.
May 1986

Senior Vice President/
General Manager, 1990
Vice President, Operations, 1985
Vice President,
Quality and Technology, 1985
Vice President,
Corporate Engineering, 1984
Vice President, Reliability &
Quality Assurance, 1982
Director, Quality & Reliability, 1980

Previous professional experience:
Aydin Corporation,
Director, Product Assurance
RCA, Manager, Quality Engineering,
Space Satellite Division

Other:
Registered Professional Engineer
BS, Physics
LaSalle University

Clifford G. Sprague
Senior Vice President
Chief Financial Officer
May 1990

Vice President,
Chief Financial Officer, 1989

Previous professional experience:
NL Industries, Inc.
Vice President & Controller
NL Oilfield Equipment Group
Vice President & Controller,
NL Shaffer Division
Controller, NL Metals Division
Assistant Controller, NL Metals

Other:
Member, Financial Executives Institute
BS, Finance
Fordham University

Moshe Jacobi
Senior Vice President

President Dicing Systems
September 1999

Managing Director,
Kulicke & Soffa (Israel) Ltd., 1998
President,
Packaging Materials Group, 1996
Senior Vice President
Expendable Tools
and Materials, 1995
Vice President, Managing Director,
Micro-Swiss Ltd., 1992
General Manager
Micro-Swiss Division, 1990
Deputy Managing Director, Operations
Kulicke & Soffa (Israel) Ltd., 1986

Previous professional experience:
Elbit Computers, Israel
F-16 Program Manager

Other:
MS, Management Science
Fairleigh Dickenson University
BS, Industrial Engineering
Fairleigh Dickenson University

David A. Leonhardt
Senior Vice President
September 1999

Vice President and General Manager,
Sales and Marketing, Equipment Group,
1998
Vice President,
Ball Bonder Division, 1997
Vice President,
Strategic Marketing, 1997
Director,
Ball Bonder New Development, 1996
Product Manager,
Ball Bonder Group, 1991
Product Manager,
Wedge Bonder Group, 1990
Engineering Manager, 1988
Engineering Supervisors,
Wedge Bonder Development, 1987
Electrical Engineer, Control Systems
Wedge Bonder Development, 1982

Other:
BSEE, Ohio State University

Charles Salmons
Senior Vice President
Customer Operations
September 1999

Vice President and
General Manager, Operations,
Equipment Group, 1998
Vice President,
Product Development
Programs, 1996
Vice President, Operations, 1994
Vice President, Manufacturing, 1982
Director, Operations, 1992
Division Director, Production, 1988
Manager, Production, 1986
Manager Production Control, 1985
Assistant Production Control
Manager, 1985
Administration Manager, 1982
Cost Accounting Supervisor, 1981
Cost Accountant, 1978

Other:
MBA, LaSalle University
BS, Business Administration
Temple University

Walter Von Seggern
Senior Vice President

President Advanced Polymer Solutions
December 1998

Senior Vice President,
Marketing Equipment Group, 1996
Vice President,
Engineering and Technology, 1992

Previous professional experience:
M/A-Com, Inc.
General Manager, Anzac
RHG and Eurotec Divisions
General Manager,
Radar Products Division
President, Industrial Lasers, Inc.
President, Sigma Design, Inc.
General Electric
General Manager,
Genographics Operation
Operations Manager,
Hybrid Integrated Circuits
Design Engineer, Heavy Military
Electronics Division

Other:
MBA, Syracuse University
MS, Electrical Engineering
Yale University
BS, Electrical Engineering
Union College

Laurence P. Wagner
Senior Vice President
July 1998

President Packaging Materials, July 1998

Previous professional experience:
EMCORE Corp.
Vice President/General Manager
Rohm and Haas Company
Operating Unit Manager
Cabot Corporation
Process Engineering Manager

Other:
MS, Chemical Engineering
Massachusetts Institute of
Technology
BS, Chemical Engineering
Massachusetts Institute of
Technology

Jack Belani
Vice President

President of X-LAM™
April 1999

Previous professional experience:
Cypress Semiconductor, 1996
Vice President
Assembly & Packaging
Worldwide Manufacturing
National Semiconductor, 1982
Director, Package Technology
Sr. Manager, Materials Technology
Advanced Micro Devices, 1981
Sr. Process Engineer
Bipolar Memory Division
National Semiconductor, 1997
Polymer Development Engineer
Package Technology

Other:
J.D., University of Santa Clara
MS, Metallurgical & Materials Engineering
Illinois Institute of Technology
B. Tech., Chemical Engineering
Indian Institute of Technology, Madras

Robert Chylak
Vice President
Engineering
September 1999

Director of Engineering
Equipment Division, 1997
Director Development
Equipment Division, 1995
Engineering Manager
8000 Bonding Platform Development, 1994
Process Engineering Manager
Equipment Division, 1992
Engineering Manager Electronics & Servos
8000 Platform Development, 1990

Other:
BSEE, Penn State University

Peter P. Cristallo
Vice President
Human Resources
October 1999

Previous professional experience:
NEC America, Inc.
Vice President Human Resources and
Administration
Bristol Myers Squibb Co.
Vice President Human Resources
Pharmaceutical Manufacturing Division
Director Human Resources
Bristol Laboratories Division
Manager Staffing and Training
Bristol Laboratories Division
Dart Industries Inc.
Manager, Chemical Group Recruiting
Manager Personnel

Other:
BA, Business Administration
St. Francis College

Walter C. DeSouza
Vice President
Chief Information Officer
November 1996

Director,
Chief Information Officer, 1995

Previous professional experience:
Raytheon Engineers & Constructors
Manager, Systems Integration
Senior Project Engineer,
Automated Systems
Chimmit, Gilman, Homchick, Inc.
Sr. Staff Consultant,
Manufacturing Systems
Unisys Corporation
Manager, Computer Integrated
Manufacturing
Activity Manager, Manufacturing
Systems Department
Manager, General Business Systems
Application Development Manager

Other:
MBA, The Wharton School
University of Pennsylvania
BS, Industrial Engineering
Federal University of Rio de Janeiro

BIOGRAPHIES

Terry Furhovden
Vice President
Wire Bonding
September 1999

Vice President, Product Marketing, 1998
Vice President Factory Systems,
Equipment Group, 1995

Previous professional experience:
MA/COM

Director, Space Products
General Manager, ANZAC
General Electric – Aerospace Group
Manager, High Density
Interconnect
Manager, Radar Production
Transition
Manager, Hybrid Integrated

Other:
MSEA, Syracuse University
BSEE, Worcester Polytechnic Institute

Ofer Greenberger
Vice President

**Managing Director,
Micro-Swiss/Semitec
Business Unit
September 1999**

Managing Director,
Micro-Swiss/Semitec, 1998
General Manager,
Semitec Inc., 1996
Manager,
Micro-Swiss Singapore Pte Ltd.,
1995
Operations & Logistics Manager,
Micro-Swiss Ltd., 1993

Previous Professional Experience:
Israel Military Industry,
B747, Program Manager

Other:
MBA, Israel Institute of Technology
BS, Mechanical Engineering
Israel Institute of Technology

Oded Lendner
Vice President
Ball Bonder Business Unit

**Managing Director, K&S Singapore
August 1999**

Vice President, Operations,
Equipment Group, 1996
Director,
Operations, 1995
Director,
Materials, 1995
Deputy Managing Director, Operations
Kulicke & Soffa (Israel) Ltd., 1993
Materials Manager,
Kulicke & Soffa (Israel) Ltd., 1990
Production Control Manager,
Kulicke & Soffa (Israel) Ltd., 1989

Other:
BS, Industrial Engineering and
Management
Israel Institute of Technology

Donald R. May, III
Vice President
May 1997

Previous professional experience:
Delta Design, Inc.
Vice President,
Worldwide Sales & Marketing
Megatest Corporation
Vice President, Worldwide Sales
Pioneer Standard Electronics, Inc.
Director of Sales Development
Director of Corporate Contracts
Director of National Accounts
Motorola New Enterprises
Western Area Manager
Applied Materials, Inc.
Central Region Manager
GCA Corporation
Central Region Manager
Kulicke & Soffa Industries, Inc.
Deputy General Manager
Western Region Manager
Central Region Manager
Sales Engineer
IBM Corporation
Systems Engineer

Other:
BA, Business Administration
BA, Political Science
Florida Atlantic University

Alexander A. Oscilowski
Vice President
Strategic Marketing
June 1999

Previous professional experience:
Sematech Inc.
Vice President/Chief Operating Officer
Director, Advanced Technology
Director, Assembly and Packaging
Digital Equipment Corporation
Manager, Semiconductor Packaging
Texas Instruments, Inc.
Manager, Packaging Development

Other:
MBA, Boston University
BS, Materials Engineering
Drexel University

Teruhiko Sawachi
Vice President

**President,
Kulicke & Soffa (Japan) Ltd.
December 1991**

Previous professional experience:
Senco Products, Inc.
Representative Director,
Senco Japan Ltd.
Regional Sales Manager for Asia
Product Manager, Staples/Staplers
Sperry Corporation
Computer Systems Division
Manager, Marketing Support and
Administration, Worldwide
Marketing
Financial Manager, International
Division
Manager, Financial Planning
Western Operations
Branch Financial Manager,
Southern California
Sperry Remington Division
Assistant to President
Nippon Remington Rand Kaisha, Ltd.
Nippon Bulge Industries, Ltd.
Manager, Strategic Planning
Matsushita Electric Industrial Co., Ltd.
Manager, Product Planning

Other:
MBA, Pepperdine University
BS, Industrial Engineering
Keio University, Tokyo, Japan

James P. Spooner
Vice President
Mergers and Acquisitions
August 1997

Previous professional experience:
Rhône-Poulenc, Inc.
Director, Corporate Development
Business Director
Director, New Business
Development
Marketing Manager
PQ Corporation
Product Manager
Commercial Development Manager
Research Chemist

Other:
MBA, Widener University
BS, Chemistry
St. Joseph's University

Shay Torton
Vice President

**Managing Director,
American Fine Wire Business
October 1999**

Managing Director
American Fine Wire, 1999
General Manager
American Fine Wire Group, 1998
General Manager
American Fine Wire Singapore,
1997
General Manager
American Fine Wire USA, 1996
Production Manager
Micro-Swiss, 1993
Logistic Manager
Micro-Swiss, 1991

Other:
BS, Industrial Engineering and Management
Israel Institute of Technology

Michael H. Wolf
Vice President
Worldwide Sales,
Equipment Group
February 1995

Previous professional experience:
Proconics International, Inc.
Vice President, Sales, Marketing
and Customer Service
Credence Systems Corporation
Regional Sales Manager
Asix Systems Corporation
Area Manager
GCA Corporation
Regional Sales Manager
IBM Corporate Account Manager
Data General Corporation
Marketing Manager
Macrodata Corporation
Sales Engineer
District Manager
Raytheon Corporation
Design Engineer

Other:
MBA, Northeastern University
MS, Electrical Engineering
Northeastern University
BS, Electrical Engineering
University of Rhode Island

COMPANY INFORMATION

BOARD OF DIRECTORS

C. Scott Kulicke
Chairman of the Board
Kulicke & Soffa Industries, Inc.

James W. Bagley
Chairman and CEO
Lam Research Corporation

Frederick W. Kulicke, Jr.
Retired Co-founder
Kulicke & Soffa Industries, Inc.

John A. O'Steen
Executive Vice-President
of Operations
Cornerstone Brands, Inc.

Allison F. Page
Retired Partner
Pepper Hamilton LLP

MacDonell Roehm, Jr.
Chairman and CEO
Crooked Creek Capital LLC

Larry D. Striplin, Jr.
Chairman and CEO
Nelson-Brantley Glass
Contractors, Inc. and
Clearview Properties

C. William Zadel
Chairman, President and CEO
Millipore Corporation

CORPORATE HEADQUARTERS
2101 Blair Mill Road
Willow Grove, PA 19090 USA
(215) 784-6000 phone
(215) 659-7588 fax

K&S is an equal opportunity employer. Our consistent management philosophy has been to provide maximum opportunities for all of our employees without regard to race, color, religion, sex, age, or national origin.

OFFICERS

C. Scott Kulicke
Chairman of the Board
Chief Executive Officer

Morton K. Perchick
Executive Vice President

Clifford G. Sprague
Senior Vice President
Chief Financial Officer

Moshe Jacobi
Senior Vice President

David A. Leonhardt
Senior Vice President

Charles Salmons
Senior Vice President

Walter Von Seggern
Senior Vice President

Laurence P. Wagner
Senior Vice President

Jack Belani
Vice President

Robert Chylak
Vice President

Peter P. Cristallo
Vice President

Walter C. DeSouza
Vice President

Terry Furhovden
Vice President

Ofer Greenberger
Vice President

Oded Lendner
Vice President

Donald R. May, III
Vice President

Alexander A. Oscilowski
Vice President

Teruhiko Sawachi
Vice President

James P. Spooner
Vice President

Shay Torton
Vice President

Michael H. Wolf
Vice President

SEMICONDUCTOR EQUIPMENT MANUFACTURING FACILITIES & TECHNOLOGY CENTERS

Kulicke & Soffa Industries, Inc.
2101 Blair Mill Road
Willow Grove, PA 19090

Kulicke & Soffa (Israel) Ltd.
Advanced Technology Center
P. O. Box 875
Haifa, Israel 31008

Kulicke & Soffa (Japan) Ltd.
No. 5 Koike Bldg. 3F
1-3-12 Kita-Shinagawa
Shinagawa-ku, Tokyo 140 Japan

Kulicke & Soffa Pte., Ltd.
Block 6 Serangoon North Ave. 5
#02-04/06 Sarengoon
North Industrial Estate
Singapore 554910

PACKAGING MATERIALS MANUFACTURING FACILITIES/TECHNOLOGY CENTERS

Micro-Swiss Ltd., Israel
P. O. Box 90
Yokneam Elite 20692
Israel

Kulicke & Soffa Singapore, Inc.
5012 Ang Mo Kio Avenue 5
#04-06 Techplace II
Singapore 569876

American Fine Wire Corporation
907 Ravenwood Drive
P. O. Box 966
Selma, AL 36701

Dr. Muller Feindraht AG
Zurcherstrasse 73
CH-8800 Thalwil-Zurich
Switzerland

Semitec
3025 Stender Way
Santa Clara, CA 95054

Advanced Polymer Solutions, LLC
2101 Blair Mill Road
Willow Grove, PA 19090

ADVANCED PACKAGING TECHNOLOGY MANUFACTURING FACILITIES

X-LAM Technologies
1504 McCarthy Boulevard
Milpitas, CA 95035

Flip Chip Technologies, LLC
3701 E. University Drive
Phoenix, AZ 85034

SALES, SERVICE AND DISTRIBUTOR LOCATIONS

USA/Americas

| | |
|---------------|--------------|
| Arizona | New Jersey |
| California | New York |
| Colorado | Ohio |
| Florida | Pennsylvania |
| Massachusetts | Texas |
| Minnesota | Washington |
| Canada | |

Europe/Africa

| | |
|-------------|--------------|
| Denmark | Norway |
| Finland | South Africa |
| France | Spain |
| Germany | Sweden |
| Israel | Switzerland |
| Italy | UK |
| Netherlands | |

Asia

| | |
|-----------|-------------|
| Australia | Malaysia |
| China | Philippines |
| Hong Kong | Singapore |
| India | Taiwan |
| Japan | Thailand |
| Korea | |

Independent Accountants

PricewaterhouseCoopers, LLP
Philadelphia, PA

Bank

PNC Bank, N.A.
Philadelphia, PA

Registrar and Transfer Agent

Common Stock
American Stock Transfer & Trust Co.
40 Wall Street
New York, NY 10005
1-800-937-5449

Stock Trading

Traded on the NASDAQ
National Market System
NASDAQ Symbol – KLIC

An electronic copy of the 1999 Annual Report and 2000 Annual Meeting Proxy Statement is available online at: <http://www.kns.com/ir/proxy/proxy.htm>

Copies of the Company's quarterly reports, 10Q's, and recent news releases may be obtained through the following services:

- K&S "Fax on Demand" Service
1-800-755-8867 (request Document 9200 for the current index)
- To order an investor kit, call
1-800-654-2582

or by contacting:

Investor Relations
Kulicke & Soffa Industries, Inc.
2101 Blair Mill Road
Willow Grove, PA 19090 USA
Phone: 215-784-6750
Fax: 215-784-6167

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