KULICKE & SOFFA INDUSTRIES INC Form 424B3 December 21, 2004 Table of Contents

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File No. 333-111478

# \$205,000,000

# 0.5% Convertible Subordinated Notes due 2008 and the Common Stock issuable upon conversion of the Notes

We issued the notes in a private placement in November 2003. This prospectus will be used by selling securityholders to resell their notes and the common stock issuable upon conversion of their notes.

The notes are convertible at any time on or before the final maturity date into shares of our common stock at an initial conversion rate of 49.1884 shares per \$1,000 principal amount of notes (equivalent to a conversion price of \$20.33 per share), subject to adjustment. We will pay interest on the notes on May 30 and November 30 of each year, beginning on May 30, 2004. The notes will mature on November 30, 2008, unless earlier converted.

Holders may require us to repurchase the notes if we experience a fundamental change before November 30, 2008, as defined in the indenture governing the notes.

Our common stock is traded on the Nasdaq National Market under the symbol KLIC. The reported last sale price of our common stock on the Nasdaq National Market on December 13, 2004 was \$8.51 per share.

Investing in the securities offered hereby involves risks. See Risk Factors beginning on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated December 21, 2004

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All references in this prospectus to Kulicke & Soffa, the company, our, us and we refer to Kulicke and Soffa Industries, Inc. and its consolid subsidiaries, except where the context otherwise requires or as otherwise indicated.

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities or soliciting an offer to buy the securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus is based on information provided by us and by other sources that we believe are reliable. We cannot assure you that this information is accurate or complete. This prospectus summarizes certain documents and other information, and we refer you to them for a more complete understanding of what we discuss in this prospectus. In making an investment decision, you must rely on your own examination of our company and the terms of this offering and the notes and underlying common stock, including the merits and risks involved.

We are not making any representation to any purchaser of the notes or the underlying common stock regarding the legality of an investment in the notes or the underlying common stock by such purchaser. You should not consider any information in this prospectus to be legal, business or tax advice. You should consult your own attorney, business advisor or tax advisor for legal, business and tax advice regarding an investment in the notes or the underlying common stock.

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#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to historical information, this prospectus 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, as amended (the Securities Act ) and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act ), and are subject to the safe harbor provisions created by statute. Such forward-looking statements include, but are not limited to, statements that relate to our future revenue, product development, demand forecasts, competitiveness, operating expenses, cash flows, profitability, gross margins and benefits expected as a result of:

the projected growth rates in the overall semiconductor industry, the semiconductor assembly equipment market, the market for semiconductor packaging materials and the market for test interconnect solutions;

the successful operation of our test interconnect business and its expected growth rate; and

the projected continuing demand for wire bonders.

Generally, words such as may, will, should, could, anticipate, expect, intend, estimate, plan, continue, and believe, or the radiations on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this prospectus. 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 Risk Factors and those detailed from time to time in our filings with the SEC. In light of these and other uncertainties, you should not conclude that we will necessarily achieve any plans or objectives or projected financial results referred to in any forward-looking statements.

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#### **SUMMARY**

This summary contains basic information about us and this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing. You should read this entire prospectus carefully, including the section entitled Risk Factors and our financial statements and the notes to our financial statements, before making an investment decision.

We design, manufacture and market capital equipment, packaging materials and test interconnect products as well as service, maintain, repair and upgrade equipment, all used to assemble and/or test semiconductor devices. We are currently the world sleading supplier of semiconductor wire bonding assembly equipment, according to VLSI Research, Inc. Our business is currently divided into three product segments:

equipment;

packaging materials; and

wafer and package test interconnect products.

We believe we are the only major supplier to the semiconductor assembly industry that can provide customers with semiconductor wire bonding equipment along with the complementary packaging materials and test interconnect products that actually contact the surface of the customer s semiconductor devices. We believe that the ability to control all of these assembly related products provides us with a significant competitive advantage and should allow us to develop system solutions to the new technology challenges inherent in assembling and packaging next-generation semiconductor devices.

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. We maintain a website with the address *www.kns.com*. We are not including the information contained on our website as a part of, or incorporating it by reference into, this prospectus.

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#### The Offering

Notes Offered \$205 million principal amount of 0.5% Convertible Subordinated Notes due 2008.

Interest 0.5% per annum on the principal amount, payable semiannually in arrears in cash on May 30 and November 30

of each year, beginning May 30, 2004.

Maturity Date November 30, 2008.

Ranking The notes are subordinated in right of payment to all of our senior indebtedness and are subordinated by

operation of law to all liabilities (including trade payables) of our subsidiaries. The notes rank equally with our

1% Convertible Subordinated Notes due 2010.

As of September 30, 2004, we had senior indebtedness outstanding in the amount of approximately \$14.3 million, and our subsidiaries had approximately \$95.9 million of liabilities outstanding, excluding liabilities

owed to us. Neither we nor our subsidiaries are prohibited from incurring debt, including senior indebtedness,

under the indenture.

Conversion You may convert each note into shares of our common stock at an initial conversion rate of 49.1884 shares per

\$1,000 principal amount of notes (equivalent to a conversion price of \$20.33 per share), subject to adjustment

upon specified events, at any time on or before the final maturity date.

In addition, if we declare a cash dividend or distribution to all or substantially all of the holders of our common stock (excluding any dividend or distribution in connection with our liquidation, dissolution or winding up), the

conversion rate will be adjusted as described under Description of Notes Conversion of the Notes.

Upon conversion, the holder will not receive any cash payment representing accrued but unpaid interest or

liquidated damages, if any.

Sinking Fund None.

Optional Redemption We may not redeem the notes before their maturity.

Fundamental Change If a fundamental change (as described under Description of Notes Fundamental Change ) occurs before

maturity, you may require us to purchase all or part of your notes at a redemption price equal to 100% of their

principal amount, plus accrued and unpaid interest.

Use of Proceeds We will not receive any of the proceeds from the sale by any selling securityholder of the notes or the

underlying common stock.

PORTAL<sup>SM</sup> Trading of Notes The notes are eligible for trading in The PORTAL<sup>SM</sup> Market of the National Association of Securities Dealers,

Inc.

Listing of Common Stock 
Our common stock is listed on the Nasdaq National Market under the symbol KLIC.

Ratio of Earnings to Fixed Our ratio of earnings to fixed charges for fiscal 2000 was 18X and for fiscal 2004 was 6X. We would have had Charges to generate additional earnings of \$77.9 million in fiscal 2001, \$233.6 million in fiscal 2002 and \$46.4 million

in fiscal 2003 to achieve a ratio of 1:1.

Risk Factors You should read Risk Factors beginning on page 4 of this prospectus to better understand the risks associated

with an investment in the notes.

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#### RISK FACTORS

You should carefully consider all of the information contained in this prospectus and the financial statements and other documents summarized in this prospectus, including the risks described below, before making an investment decision. The risks described below are not the only ones facing our company. Additional risks not currently known to us or that we currently consider less significant may also impair our business operations.

Our business, financial condition, or results of operations could be materially, adversely affected by any of these risks. The trading price of the notes and our common stock could decline due to any of these risks, and you may lose all or part of your investment.

#### **Risks Related to Our Business**

The semiconductor industry is volatile with sharp periodic downturns and slowdowns

Our operating results are significantly affected by the capital expenditures of large semiconductor manufacturers and their subcontract assemblers and by those of vertically integrated manufacturers of electronic systems. Expenditures by semiconductor manufacturers and their subcontract assemblers and by vertically integrated manufacturers of electronic systems depend on the current and anticipated market demand for semiconductors and products that use semiconductors, including personal computers, telecommunications equipment, consumer electronics, and automotive goods. Significant downturns in the market for semiconductor devices or in general economic conditions reduce demand for our products and materially and adversely affect our business, financial condition and operating results.

Historically, the semiconductor industry has been volatile, with periods of rapid growth followed by industry-wide retrenchment. These periodic downturns and slowdowns have adversely affected our business, financial condition and operating results. They have been characterized by, among other things, diminished product demand, excess production capacity, and accelerated erosion of selling prices. These downturns historically have severely and negatively affected the industry s demand for capital equipment, including the assembly equipment, the packaging materials and test interconnect solutions that we sell.

The semiconductor industry experienced downturns in fiscal 1998 through the first half of fiscal 1999, in fiscal 2001 through the first three quarters of fiscal 2003 and we are currently seeing a slowing in customer demand for our wire bonders. In the 1998-1999 downturn, our net sales declined from approximately \$501.9 million in fiscal 1997 to \$411.0 million in fiscal 1998. In the 2001-2003 downturn, our net sales declined from approximately \$877.6 million in fiscal 2000 to \$441.6 million in fiscal 2002. The business environment was improved in the fourth quarter of fiscal 2003 through the first nine months of fiscal 2004 but we experienced slowing in demand for our wire bonders in our fourth quarter of fiscal 2004 and we anticipate further slowing in demand for our wire bonders in the first fiscal quarter of 2005. There can be no assurances regarding the level of demand for our products, and in any case, we believe the historical volatility both upward and downward will persist. Any downturn may be more severe and prolonged than those experienced in the past. Downturns adversely affect our business, financial condition and operating results.

We may experience increasing price pressure

Our historical business strategy for many of our products has focused on product performance and customer service more than on price. The length and severity of the most recent economic downturn increased cost pressures on our customers and we have observed increasing price sensitivity on their part. In response, we are actively seeking to reduce our cost structure by moving operations to lower cost areas and by reducing other operating costs. If we are unable to realize prices that allow us to continue to compete on the basis of performance and service, our financial condition and operating results may be materially and adversely affected.

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

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

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

market downturns;

the mix of products that we sell because, for example:

our test division has lower margins than assembly equipment and packaging materials;

some lines of equipment within our business segments 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;

virtually all of our orders are subject to cancellation, deferral or rescheduling by the customer without prior notice and with limited or no penalties;

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 the components for our products;

unanticipated delays in the introduction of our new products and upgraded versions of our products and market acceptance of these products when introduced;

customers delay in purchasing our products due to customer anticipation that we or our competitors may introduce new or upgraded products; and

our competitors introduction of new products.

Many of our expenses, such as research and development, selling, general and administrative expenses and interest expense, do not vary directly with our net 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. In a downturn, we may have excess inventory, which is required to be written off. Some of the other factors that may cause our expenses to fluctuate from period-to-period include:

the timing and extent of our research and development efforts;
severance, resizing and the costs of relocating or closing down facilities;
inventory write-offs due to obsolescence; and
inflationary increases in the cost of labor or materials.

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

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

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

Most of our sales and a substantial portion of our manufacturing operations are located outside of the United States, and we rely on independent foreign distribution channels for certain product lines; all of which subject us to risks from changes in trade regulations, currency fluctuations, political instability and war

Approximately 86% of our net sales for fiscal 2004, 80% of our net sales for fiscal 2003 and 74% of our net sales for fiscal 2002 were attributable to sales to customers for delivery outside of the United States, in particular to customers in the Asia/Pacific region. We expect this trend to continue. Thus, our future performance will depend, in significant part, on our ability to continue to compete in foreign markets, particularly in Asia/Pacific. These economies have been highly volatile, resulting in significant fluctuation in local currencies, and political and economic instability. These conditions may continue or worsen, which may materially and adversely affect our business, financial condition and operating results.

We also rely on non-United States suppliers for materials and components used in our products, and most of our manufacturing operations are located in countries other than the United States. We manufacture our automatic ball bonders and bonding wire in Singapore, capillaries in Israel and China, bonding wire in Switzerland, test products in Taiwan, China, France, and Scotland and we have sales, service and support personnel in China, Hong Kong, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Europe. We also rely on independent foreign distribution channels for certain of our product lines. As a result, a major portion of our business is subject to the risks associated with international, and particularly Asia/Pacific, commerce, such as:

terrorism, war and civil disturbances or other events that may limit or o	lisrupt markets
expropriation of our foreign assets;	
longer payment cycles in foreign markets;	
international exchange restrictions;	
restrictions on the repatriation of our assets, including cash;	
possible disagreements with tax authorities regarding transfer pricing r	egulations;

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the difficulties of staffing and managing dispersed international operations;
episodic events outside our control such as, for example, the outbreak of Severe Acute Respiratory Syndrome;
tariff and currency fluctuations;
changing political conditions;

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labor conditions and costs:

foreign governments monetary policies and regulatory requirements;

less protective foreign intellectual property laws; and

legal systems which are less developed and which may be less predictable than those in the United States.

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 may be materially and adversely affected by a strengthening of the United States dollar against foreign currencies. Because we have significant assets, including cash, outside the United States, those assets are subject to risks of seizure, and it may be difficult to repatriate them, or repatriation may result in the payment by us of significant United States taxes.

Our international operations also depend upon favorable trade relations between the United States and those foreign countries in which our customers, subcontractors, and materials suppliers have operations. A protectionist trade environment in either the United States or those foreign countries in which we do business, such as a change in the current tariff structures, export compliance or other trade policies, may materially and adversely affect our ability to sell our products in foreign markets. In addition, any change to existing United States laws or the enactment of new laws penalizing United States companies for reducing the number of United States based employees and hiring more employees in foreign countries may adversely affect our business, financial condition and operating results.

We may not be able to consolidate manufacturing facilities without incurring unanticipated costs and disruptions to our business

In an effort to further reduce our cost structure, we have initiated a process of closing some of our manufacturing facilities and expanding others. We may incur significant and unexpected costs, delays and disruptions to our business during this consolidation process. Because of unanticipated events, including the actions of governments, employees or customers, we may not realize the synergies, cost reductions and other benefits of any consolidation to the extent or within the timeframe that we currently expect.

Our business depends on attracting and retaining management, marketing and technical employees

As with many other technology companies, our future success depends on our ability to hire and retain qualified management, marketing and technical employees. In particular, we periodically experience shortages of engineers. If we are unable to continue to attract and retain the managerial, marketing and technical personnel we require, our business, financial condition and operating results could be materially and adversely affected.

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

We typically operate our business with a relatively short backlog. As a result, we sometimes experience inventory shortages or excesses. We generally order supplies and otherwise plan our production based on internal forecasts of demand. We have in the past, and may again in the future, fail to forecast accurately demand for our products, 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. If we fail to forecast accurately demand for our products, including assembly equipment, packaging materials and test interconnect solutions, our business, financial condition and operating results may be materially and adversely affected.

Advanced packaging technologies other than wire bonding may render some of our products obsolete

Advanced packaging technologies have emerged that may improve device performance or reduce the size of an integrated circuit package, as compared to traditional die and wire bonding. These technologies include flip chip and chip scale packaging. Some of these advanced technologies eliminate the need for wires to establish the electrical connection between a die and its package. The semiconductor industry may, in the future, shift a significant part of its volume into

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advanced packaging technologies, such as those discussed above, which do not employ our products. If a significant shift to advanced packaging technologies were to occur, demand for our wire bonders and related packaging materials may be materially and adversely affected.

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

The semiconductor manufacturing industry is highly concentrated, with a relatively small number of large semiconductor manufacturers and their subcontract assemblers and vertically integrated manufacturers of electronic systems purchasing a substantial portion of our semiconductor assembly equipment, packaging materials and test interconnect solutions. Sales to a relatively small number of customers account for a significant percentage of our net sales. In fiscal 2004, fiscal 2003 and fiscal 2002, sales to Advanced Semiconductor Engineering, our largest customer, accounted for 17%, 13% and 13%, respectively, of our net sales.

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

We depend on a small number of suppliers for raw materials, components and subassemblies. If our suppliers do not deliver their products to us, we would be unable to deliver our products to our customers

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

lack of control over the manufacturing process for components and subassemblies;

changes in our manufacturing processes, in response to changes in the market, which may delay our shipments;

our inadvertent use of defective or contaminated raw materials;

the relatively small operations and limited manufacturing resources of some of our suppliers, which may limit their ability to manufacture and sell subassemblies, components or parts in the volumes we require and at acceptable quality levels and prices;

reliability or quality problems with certain key subassemblies provided by single source suppliers as to which we may not have any short term alternative;

shortages caused by disruptions at our suppliers and subcontractors for a variety of reasons, including work stoppage or fire, earthquake, flooding or other natural disasters;

delays in the delivery of raw materials or subassemblies, which, in turn, may delay our shipments; and

the loss of suppliers as a result of the consolidation of suppliers in the industry.

If we are unable to deliver products to our customers on time for these or any other reasons; if we are unable to meet customer expectations as to cycle time; or if we do not maintain acceptable product quality or reliability, our business, financial condition and operating results may be materially and adversely affected.

Our test division and our diversification presents significant management and operating challenges

During fiscal 2001, we acquired two companies that design and manufacture test interconnect solutions, Cerprobe Corporation and Probe Technology Corporation, and combined their operations to create our test division. Since its acquisition in 2001, this division has not performed to our expectations. Problems have included difficulties in rationalizing duplicate products and facilities, and in integrating these acquisitions. Our plan to correct these problems centers on the following steps: standardize production processes between the various test manufacturing sites, create and ramp production of our highest volume products in a new lower cost site in China and/or outsource production where appropriate, then rationalize excess capacity by converting existing higher cost, low volume manufacturing sites to service centers. If we are unable to successfully implement this plan, our operating margins and results of operations will continue to be adversely affected by the performance of our test division.

More generally, our diversification strategy has increased demands on our management, financial resources and information and internal control systems. Our success will depend, in part, on our ability to manage and integrate our test division and our equipment and packaging materials businesses and to continue successfully to implement, improve and expand our systems, procedures and controls. If we fail to integrate our businesses successfully or to develop the necessary internal procedures to manage diversified businesses, our business, financial condition and operating results may be materially and adversely affected.

Although we have no current plans to do so, we may from time to time in the future seek to expand our business through acquisition. In that event, the success of any such acquisition will depend, in part, on our ability to integrate and finance (on acceptable terms) the acquisition.

We may be unable to continue to compete successfully in the highly competitive semiconductor equipment, packaging materials and test interconnect solutions industries

The semiconductor equipment, packaging materials and test interconnect solutions industries are very competitive. In the semiconductor equipment and test interconnect solutions markets, significant competitive factors include performance, quality, customer support and price. In the semiconductor packaging materials industry, competitive factors include price, delivery and quality.

In each of our markets, we face competition and the threat of competition from established competitors and potential new entrants, some of which have or may have significantly greater financial, engineering, manufacturing and marketing resources than we have. Some of these competitors are Asian and European companies that have had and may continue to have an advantage over us in supplying products to local customers who appear to prefer to purchase from local suppliers, without regard to other considerations.

We expect our competitors to improve their current products—performance, and to introduce new products and materials with improved price and performance characteristics. Our competitors may independently develop technology that is similar to or better than ours. New product and materials 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 or materials for a particular assembly operation, we may not be able to sell products or materials to that manufacturer or assembler for a significant period of time because manufacturers and assemblers sometimes develop lasting relations with suppliers, and assembly equipment in our industry often goes years without requiring replacement. In addition, we may have to lower our prices in response to price cuts by our competitors, which may materially and adversely affect our business, financial condition and operating results. We cannot assure you that we will be able to continue to compete in these or other areas in the future. If we cannot compete successfully, we could be forced to reduce prices, and could lose customers and market share and experience reduced margins and profitability.

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

Our success depends in part on our proprietary technology. To protect this technology, we rely principally on contractual restrictions (such as nondisclosure and confidentiality provisions) in our agreements with employees, subcontractors,

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vendors, consultants and customers and on the common law of trade secrets and proprietary know-how. We also rely, in some cases, on patent and copyright protection. We may not be successful in protecting our technology for a number of reasons, including the following:

employees, subcontractors, vendors, consultants and customers may violate their contractual agreements, and the cost of enforcing those agreements may be prohibitive, or those agreements may be unenforceable or more limited than we anticipate;

foreign intellectual property laws may not adequately protect our intellectual property rights;

our patent and copyright claims may not be sufficiently broad to effectively protect our technology; our patents or copyrights may be challenged, invalidated or circumvented; or we may otherwise be unable to obtain adequate protection for our technology.

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

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

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

Occasionally, third parties assert that we are, or may be, infringing on or misappropriating their intellectual property rights. In these cases, we 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 are parties to litigation brought by the Lemelson Medical, Education and Research Foundation Limited Partnership (Lemelson), in which Lemelson claims that certain manufacturing processes used by those customers infringe patents held by Lemelson. We have never been named a party to any such litigation. Some customers have requested that we indemnify them to the extent their liability for these claims arises from use of our equipment. We do not believe that products sold by us infringe valid Lemelson patents. If a claim for contribution were to be brought against us, we believe we would have valid defenses to assert and also would have rights to contribution and claims against our suppliers. We have not incurred any material liability with respect to the Lemelson claims or any other pending intellectual property claim to date and we do not believe that these claims will materially and adversely affect our business, financial condition or operating results. The ultimate outcome of any infringement or misappropriation claim that might be made, however, is uncertain and we cannot assure you that the resolution of any such claim would not materially and adversely affect our business, financial condition and operating results.

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

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

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

In the future, existing or new land use and environmental regulations may: (1) impose upon us the need for additional capital equipment or other process requirements, (2) restrict our ability to expand our operations, (3) subject us to liability for, among other matters, remediation, and/or (4) cause us to curtail our operations. We cannot assure you that any costs or liabilities associated with complying with these environmental laws will not materially and adversely affect our business, financial condition and operating results.

We have significant intangible assets and goodwill, which we are required to evaluate annually

In fiscal 2002 and 2003, we recorded substantial write-downs of goodwill. However, our financial statements continue to reflect significant intangible assets and goodwill. We are required to perform an impairment test at least annually to support the carrying value of goodwill and intangible assets. Should we be required to recognize additional intangible or goodwill impairment charges, our financial condition would be adversely affected.

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

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

classify our board of directors into four classes, with one class being elected each year;

permit our board to issue blank check preferred stock without stockholder 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 stockholder approval.

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

Terrorist attacks, such as the attacks that occurred in New York and Washington, D.C. on September 11, 2001, or other acts of violence or war may affect the markets in which we operate and our profitability

Terrorist attacks may negatively affect our operations. There can be no assurance that there will not be further terrorist attacks against the United States or United States businesses. These attacks or armed conflicts may directly impact our physical facilities or those of our suppliers or customers. Our primary facilities include administrative, sales and R&D facilities in the United States and manufacturing facilities in the United States, Israel, Singapore and China. Also, these attacks have disrupted the global insurance and reinsurance industries with the result that we may not be able to obtain insurance at historical terms and levels for all of our facilities. Furthermore, these attacks may make travel and the transportation of our supplies and products more difficult and more expensive and ultimately affect the sales of our products in the United States and overseas. The existing conflicts in Afghanistan and Iraq, and particularly in Israel, where we maintain a manufacturing facility, or any broader conflict, could have a further impact on our domestic and international sales, our supply chain, our production capability and our ability to deliver products to our customers. Political and economic instability in some regions of the world could negatively impact our business. The consequences of any of these armed conflicts are unpredictable, and we may not be able to foresee events that could have an adverse effect on our business or your investment.

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Changes in stock option accounting rules may adversely impact our reported operating results prepared in accordance with generally accepted accounting principles, our stock price and our competitiveness in the employee marketplace

We have a history of using broad based employee stock option programs to hire, incentivize and retain our workforce. Currently, Statement of Financial Accounting Standards (SFAS) No. 123, Accounting for Stock-Based Compensation, allows companies the choice of either using a fair value method of accounting for options, which would result in expense recognition for all options granted, or using an intrinsic value method, as prescribed by Accounting Principles Board Opinion (APB) No. 25, Accounting for Stock Issued to Employees, with a proforma disclosure of the impact on net income of using the fair value recognition method. We have elected to apply APB 25 and accordingly, we do not recognize any expense with respect to employee stock options as long as such options are granted at exercise prices equal to the fair value of our common stock on the date of grant.

In October 2004, the Financial Accounting Standards Board (FASB) concluded that SFAS No. 123R, Share-Based Payment, will be effective for public companies for interim or annual periods beginning after June 15, 2005. Under SFAS No. 123R, companies must measure compensation cost for all share-based payments, including employee stock options, using a fair value based method and these payments must be recognized as expenses in our statements of operations.

The implementation of SFAS No. 123R beginning in the fourth quarter of fiscal 2005 will have a significant adverse impact on our consolidated statement of operations because we will be required to expense the fair value of our stock options rather than disclosing the impact on results of operations within our footnotes in accordance with the disclosure provisions of SFAS No. 123 (see Note 1 of the Notes to Consolidated Financial Statements). This will result in lower reported earnings per share, which could negatively impact our future stock price. In addition, this could negatively impact our ability to utilize employee stock plans to recruit and retain employees and could result in a competitive disadvantage to us in the employee marketplace.

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Risks Relating to an Investment in the Notes and our Common Stock

We may be unable to generate enough cash to service our debt

Our ability to make payments on our indebtedness and to fund planned capital expenditures and other activities will depend on our ability to generate cash in the future. If our convertible debt is not converted to our common shares, we will be required to make annual cash interest payments of \$1.7 million in each of fiscal years 2005 through 2008, \$821 thousand in fiscal 2009 and \$488 thousand in fiscal 2010 on our aggregate \$270 million of convertible subordinated debt. Principal payments of \$205.0 million and \$65.0 million on the convertible subordinated debt are due in fiscal 2009 and 2010, respectively. Our ability to make payments on a indebtedness is affected by the volatile nature of our business, and general economic, competitive and other factors that are beyond our control. Our indebtedness poses risks to our business, including that:

we must use a substantial portion of our consolidated cash flow from operations to pay principal and interest on our debt, thereby reducing the funds available for working capital, capital expenditures, acquisitions, product development and other general corporate purposes;

insufficient cash flow from operations may force us to sell assets, or seek additional capital, which we may be unable to do at all or on terms favorable to us; and

our level of indebtedness may make us more vulnerable to economic or industry downturns.

We cannot assure you that our business will generate cash in an amount sufficient to enable us to service interest, principal and other payments on our debt, including the notes, or to fund our other liquidity needs.

We are not restricted under the agreements governing our existing indebtedness from incurring additional debt in the future. If new debt is added to our current levels, our leverage and our debt service obligations would increase and the related risks described above could intensify.

Our stock price has been and is likely to continue to be highly volatile, which may significantly affect the trading price of the notes

In recent years, the price of our common stock has fluctuated greatly. These price fluctuations have sometimes been rapid and severe. Fluctuations in the trading price of our common stock will affect the trading price of the notes. The price of our common stock may continue to fluctuate greatly in the future due to a variety of factors, including:

quarter to quarter variations in our operating results;

differences in our revenue or earnings from levels expected by securities analysts as well as changes in their recommendations;

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changes in the ratings of our notes;

announcements of technological innovations or new products by us or other companies; and

slowdowns or downturns in the semiconductor industry.

One or more of these factors could significantly harm our business and cause a decline in the price of our common stock in the public market, which could adversely affect your investment as well as our business and financial operations.

The price of our common stock also could be affected by possible sales of our common stock by investors who view the notes as a more attractive means of equity participation in our company and by hedging or arbitrage activity that may develop involving our common stock as a result of the issuance of the notes. The hedging or arbitrage could, in turn, affect the trading prices of the notes.

We have the ability to issue additional equity securities, which would lead to dilution of our issued and outstanding common stock, and the new equity securities that we may issue could include preferred stock that may have rights and preferences that are superior to the rights of holders of our common stock

The issuance of additional equity securities or securities convertible into equity securities will result in dilution of existing stockholders equity interests in us. Our board of directors has the authority to issue, without vote or action of stockholders, shares of preferred stock in one or more series, and has the ability to fix the rights, preferences, privileges and restrictions of any such series. Any such series of preferred stock could contain dividend rights, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences or other rights superior to the rights of holders of our common stock. Our board of directors has no present intention of issuing any such preferred stock, but reserves the right to do so in the future. In addition, we are authorized to issue, without stockholder approval, up to an aggregate of 200 million shares of common stock, of which approximately 51.2 million shares were outstanding as of September 30, 2004. We are also authorized to issue, without stockholder approval, securities convertible into either shares of common stock or preferred stock.

We do not expect to pay dividends on our common stock in the foreseeable future

Although our shareholders may receive dividends if, as and when declared by our board of directors, we do not intend to pay dividends on our common stock in the foreseeable future. Therefore, you should not purchase our common stock if you need immediate or future income by way of dividends from your investment.

Our obligations under the notes are unsecured and subordinated to all of our existing and future senior debt

Our obligations under the notes are unsecured and rank junior in priority of payment to all of our present and future senior debt. As a result, upon any distribution to our creditors in a bankruptcy, liquidation or reorganization or similar proceeding relating to us or our property, the holders of our senior debt will be entitled to be paid in full before any payment may be made with respect to the notes. In the event of a bankruptcy, liquidation or reorganization or similar proceeding relating to us, holders of the notes will participate with trade creditors and all holders of our other subordinated indebtedness in the assets remaining after we have paid all of our senior debt. In addition, upon a payment

default with respect to designated senior debt, a covenant default entitling designated senior debt to accelerate or upon acceleration of the notes, the holders of our senior debt will be entitled to be paid before any payment will be made on the notes or on our 1% Convertible

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Subordinated Notes due 2010. As of September 30, 2004, we had senior indebtedness outstanding in the amount of approximately \$14.3 million. We also have or may incur new or additional obligations under letters of credit, guarantees, foreign exchange contracts or in other obligations contracts that would be senior to our obligations under the notes. The notes and the related indenture do not limit our ability, or our subsidiaries ability, to incur additional indebtedness, liabilities and obligations.

We may need to refinance all or a portion of our indebtedness on or before maturity. We cannot assure you that we will be able to refinance any of our indebtedness on commercially reasonable terms, if at all.

#### Creditors of our subsidiaries will get paid before you will get paid

Substantially all of our operations are conducted through our subsidiaries. Accordingly, we are dependent upon the cash flows of our subsidiaries to meet our debt obligations, including our obligations under the notes. The notes are not guaranteed by our subsidiaries and, consequently, our subsidiaries are not obligated or required to pay any amounts pursuant to the notes or to make funds available to us in the form of dividends or advances. In the future, we may change some portion of our business that we operate through our subsidiaries. Any payment of dividends, distributions, loans or advances by our subsidiaries will also be contingent upon our subsidiaries earnings, subject to statutory restrictions and possibly restricted by the contractual obligations of our subsidiaries.

In addition, our right to participate in any distribution of assets of any of our subsidiaries, upon any subsidiary s bankruptcy, liquidation, reorganization or similar proceeding, and thus your ability as a holder of the notes to benefit indirectly from such distribution, will be subject to the prior claims of creditors of that subsidiary, except to the extent that any of our claims as a creditor of such subsidiary may be recognized. As a result, the notes are structurally subordinated to all existing and future indebtedness and other liabilities and obligations, including trade payables, of our subsidiaries, if any. Therefore, holders of the notes should look only to our assets for payments on the notes. The notes and the related indenture do not limit the ability of any our subsidiaries to incur additional indebtedness, liabilities or obligations. As of September 30, 2004, our subsidiaries had approximately \$95.9 million of liabilities outstanding, excluding inter-company liabilities.

If we experience a fundamental change, we may be unable to purchase your notes as required under the indenture

Upon a fundamental change, as defined in the indenture, you will have the right to require us to purchase your notes for cash. A fundamental change would also require that we offer to purchase for cash our

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1% Convertible Subordinated Notes due 2010. If we experience a fundamental change and do not have sufficient funds to pay the purchase price for all of the notes tendered, this would constitute an event of default under the indenture governing the notes. In addition, a fundamental change may be prohibited or limited by, or create an event of default under, other agreements relating to borrowings that we may enter into from time to time, which are likely to be senior indebtedness. Therefore, a fundamental change at a time when we cannot pay for your notes that are tendered as a result of such fundamental change could result in your receiving substantially less than the principal amount of the notes. See Description of Notes Fundamental Change and Subordination of the Notes.

#### The notes are not protected by restrictive covenants

The indenture governing the notes does not contain any financial or operating controls or restrictions on the payment of dividends, the incurrence of indebtedness or the issuance or repurchase of securities by us or any of our subsidiaries. For example, the indenture does not restrict our ability in the future to enter into credit facilities that are senior to the notes. Also, the indenture does not contain covenants or other provisions to afford protection to holders of the notes in the event of a fundamental change involving us, except to the extent described under Description of Notes Fundamental Change.

In certain circumstances this registration statement may not be used to resell the notes and the common stock issuable upon their conversion; there is no prior public market for the notes, if an active trading market does not develop for the notes you may not be able to resell them

The notes and the common stock issuable upon conversion of the notes may only be offered or sold pursuant to an exemption from the registration requirements of the Securities Act or pursuant to an effective registration statement, such as the registration statement of which this prospectus forms a part. We may suspend the use of this registration statement for up to 45 days in any 3 month period or 90 days in any 12 month period under certain circumstances relating to pending corporate developments, public filings with the SEC and similar events. We also are permitted to suspend the use of the registration statement for up to 60 days in any 3 month period under certain circumstances relating to possible acquisitions, financings or similar transactions or reviews by the SEC of our filings. We cannot assure you that we, or events beyond our control, will not result in our suspending our registration of the notes or the common stock. Currently, there is no public market for the notes and we cannot assure you that an active trading market will ever develop for the notes. We also cannot assure you of the pricing at which you will be able to sell your notes if you are able to sell them at all. Future trading prices of the notes will depend on many factors, including, among other things, prevailing interest rates, our operating results and the market for similar securities. We do not intend to apply for listing of the notes on any securities exchange.

If you hold notes, you will not be entitled to any rights with respect to our common stock, but you will be subject to all changes made with respect to our common stock

If you hold notes, you will not be entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock), but you will be subject to all changes affecting the common stock. You will have rights with respect to our common stock only if and when we deliver shares of common stock to you upon conversion of your notes and, in limited cases, under the conversion rate adjustments applicable to the notes. For example, if we propose an amendment to our articles of incorporation requiring shareholder approval, and the record date for determining the shareholders of record entitled to vote on the amendment occurs before delivery of common stock to you, you will not be entitled to vote on the amendment, although you will nevertheless be subject to any changes in the powers, preferences or special rights of our common stock effected by the amendment, if adopted.

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The conversion rate of the notes will not be adjusted for all dilutive events

The conversion rate of the notes is subject to adjustment for certain limited events including, but not limited to, the issuance of stock dividends on our common stock, the issuance of certain rights or warrants, subdivisions and combinations of our common stock, certain distributions of assets, debt securities, capital stock or cash to holders of our common stock and certain issuer tender or exchange offers. See Description of Notes Conversion of the Notes. The conversion rate will not be adjusted for other events, such as an issuance of common stock for cash that may adversely affect the trading price of the notes or the common stock. We cannot assure you that an event that adversely affects the value of the notes, but does not result in an adjustment to the conversion rate, will not occur.

The notes may not be rated or may receive a lower rating than anticipated

We do not intend to seek a rating on the notes. However, if one or more rating agencies rates the notes and assigns the notes a rating lower than the rating expected by the investors, or reduces its rating in the future, the market price of the notes and our common stock would be harmed.

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#### USE OF PROCEEDS

We will not receive any proceeds from the sale by any selling securityholder of the notes or the underlying common stock.

#### RATIO OF EARNINGS TO FIXED CHARGES

The ratio of earnings to fixed charges for each of the periods indicated is as follows:

	Fisca	l Years	Ended S	eptemb	er 30,
	2000	2001	2002	2003	2004
Ratio of earnings to fixed charges	18x				6x

These computations include us and our consolidated subsidiaries. These ratios are computed by dividing (a) income (loss) before taxes from continuing operations plus fixed charges and equity in loss of joint ventures by (b) fixed charges, which includes interest expense plus the portion of rent expense under operating leases we deem to be representative of the interest factor and amortization of debt issue costs.

We would have had to generate additional earnings of \$77.9 million in fiscal 2001, \$233.6 million in fiscal 2002 and \$46.4 million in fiscal 2003 to achieve a ratio of 1:1.

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#### PRICE RANGE OF COMMON STOCK

Our common stock is listed and traded on the Nasdaq National Market under the symbol KLIC. The following table sets forth, for the periods indicated, the range of high and low per share sale prices for our common stock. On December 13, 2004, the last reported sale price of our common stock was \$8.51 per share.

		Common Stock Price		
	_ ! 	High		Low
Year ended September 30, 2003:				
First Quarter	\$	6.74	\$	1.91
Second Quarter		7.59		4.39
Third Quarter		8.00		4.61
Fourth Quarter		13.25		5.99
Year ended September 30, 2004:				
First Quarter	\$	17.20	\$	10.83
Second Quarter		16.72		10.51
Third Quarter		12.80		9.61
Fourth Quarter		10.95		4.80
Year ended September 30, 2005:				
First Quarter (as of December 13, 2004)	\$	9.30	\$	5.70

As of December 10, 2004, we had approximately 533 stockholders of record.

## DIVIDEND POLICY

The payment of dividends on our common stock is within the discretion of our board of directors. We have not historically paid 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.

#### **CAPITALIZATION**

The following table shows our unaudited cash, cash equivalents and short-term investments, and capitalization as of September 30, 2004 on an actual basis. This table should be read in conjunction with our financial statements, related notes and the other information included or referred to in this prospectus.

	As of September 30, 2004			
		(in thousands, except share data)		
Cash, cash equivalents and short-term investments	\$	92,509		
Restricted cash	\$	3,257		
		_		
Short-term obligations:				
Current portion of long-term debt	\$	202		
T ( 19 0				
Long-term obligations: 1% Convertible Subordinated Notes due 2010		65,000		
0.5% Convertible Subordinated Notes due 2010		65,000 205,000		
Bank borrowings, net of current portion		5,400		
Capitalized leases, net of current position		325		
Other long-term liabilities		45,087		
Total long-term obligations		320,812		
Stockholders equity:				
Preferred Stock, without par value; 5 million shares authorized; none issued or outstanding				
Common Stock, without par value; 200 million shares authorized; 51,162,259 issued and outstanding <sup>(1)</sup>		213,847		
Retained Deficit		(139,192)		
Accumulated other comprehensive loss		(6,915)		
Total Stockholders Equity		67,020		
Total Capitalization	\$	388,034		

<sup>(1)</sup> Excludes (i) 8.7 million shares as of September 30, 2004 issuable upon exercise of outstanding stock options, (ii) 5.1 million shares issuable upon conversion of the 1.0% Convertible Subordinated Notes due 2010, and (iii) 10.1 million shares issuable upon conversion of the notes.

#### BUSINESS

We design, manufacture and market capital equipment, packaging materials and test interconnect products as well as service, maintain, repair and upgrade equipment, all used to assemble and/or test semiconductor devices. We are currently the world s leading supplier of semiconductor wire bonding assembly equipment, according to VLSI Research, Inc. Our business is currently divided into three product segments:

equipment;
packaging materials; and
wafer and package test interconnect products.

We completed the divestiture of our former advanced packaging technologies segment in February 2004.

Our goal is to be both the technology leader and the lowest cost supplier in each of our major lines of business. We believe we are the only major supplier to the semiconductor assembly industry that can provide customers with semiconductor wire bonding equipment along with the complementary packaging materials and test interconnect products that actually contact the surface of the customer's semiconductor devices. We believe that the ability to control all of these assembly related products provides us with a significant competitive advantage, and should allow us to develop system solutions to the new technology challenges inherent in assembling and packaging next-generation semiconductor devices.

The semiconductor industry has been historically volatile, with periods of rapid growth followed by downturns. In response to recent downturns, we shifted our strategy, focusing on our larger, more established product lines, and divesting or discontinuing smaller or more speculative businesses. Additionally, we continuously seek to further reduce our cost structure by moving operations to lower cost areas, moving away from non-core businesses, and increasing productivity. We believe the historical volatility of the semiconductor industry both upward and downward will persist.

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. We maintain a website with the address www.kns.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this filing. We make available free of charge (other than an investor s own Internet access charges) on or through our website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to these reports, as soon as reasonably practicable after the material is electronically filed with or otherwise furnished to the Securities and Exchange Commission.

#### **Products and Services**

We offer a range of wire bonding equipment and spare parts, packaging materials, and test interconnect products. Set forth below is a table listing the net sales from continuing operations for each business segment for our fiscal years ended September 30, 2002, 2003, and 2004:

(in thousands)

	Fiscal Ye	Fiscal Year Ended September 30,			
	2002	2003 <sup>(1)</sup>	2004		
	Net Sales	Net Sales Net Sales			
Equipment	\$ 169,469	\$ 198,447	\$ 361,244		
Packaging materials	157,176	174,471	234,690		
Test interconnect	114,698	104,882	121,877		
Other (2)	222	135			
	\$ 441,565	\$ 477,935	\$ 717,811		

<sup>(1)</sup> In the fourth quarter of fiscal 2003, we sold the assets related to the saw and hard material blade businesses that were part of the equipment segment and packaging materials segment, respectively. Those businesses together had fiscal 2003 revenue of \$11.3 million.

Our equipment sales are highly volatile, based on the semiconductor industry s need for new capability and capacity, whereas packaging materials and test interconnect sales in general tend to be more stable, following the trend of total semiconductor unit production.

See Note 13 to our Consolidated Financial Statements for financial results by business segment and sales by geographic location.

## **Equipment**

We manufacture and market a line of wire bonders, which are used to connect very fine wires, typically made of gold, aluminum or copper, between the bond pads of a semiconductor die and the leads on the integrated circuit (IC) package to which the die has been attached. We believe that our wire bonders offer competitive advantages by providing customers with high productivity/throughput and superior package quality/process control. In particular, our machines are capable of performing very fine pitch bonding as well as creating the sophisticated wire loop shapes that are needed in the assembly of advanced semiconductor packages. Our principal products are:

*Ball Bonders*. Automatic IC ball bonders represent a large majority of our semiconductor equipment business. As part of our competitive strategy, we have been introducing new models of IC ball bonders every 15 to 24 months, with each new model designed to increase both productivity and process capability compared to its predecessor. In May 2002, we began marketing the Maxum IC ball bonder, which offered

<sup>(2)</sup> Comprised of sales associated with our substrate business that was closed in fiscal 2002.

up to 20% more productivity than its predecessor. In the second quarter of fiscal 2004, we began shipping the Maxum Plus to customers offering further productivity increases, as well as process capability improvements. In addition, in January of 2003, we began shipping the Nu-Tek , a new automatic wire bonder optimized for low lead count ICs and discrete device applications, which are both segments of the market where we had not previously participated.

Specialty Wire Bonders. We also produce other models of wire bonders, targeted at specific market niches, including: the Model 8098, a large area ball bonder designed for wire bonding hybrid, chip on board, and other large area applications; the WaferPRO Plus, for wafer level bumping for area array applications; the Triton RDA, a wedge bonder designed for ribbon bonding; and the Model 8090, a large area wedge bonder. We also manufacture and market a line of manual wire bonders.

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We believe that our industry knowledge and technical experience have positioned us to deliver innovative, customer-specific offerings that reduce the cost of owning our equipment over its useful life. In response to customer trends in outsourcing packaging requirements, we provide repair and maintenance services, a variety of equipment upgrades, machine and component rebuild activities and expanded customer training through our customer operations group.

#### **Packaging Materials**

We manufacture and market a range of semiconductor packaging materials and expendable tools for the semiconductor assembly market, including very fine gold, aluminum and copper wire, capillaries, wedges, die collets and saw blades, all of which are used in packaging and assembly processes. Our packaging materials are designed for use on both our own and our competitors—assembly equipment. A wire bonder uses a capillary or wedge tool and bonding wire much like a sewing machine uses a needle and thread. Our principal products are:

Bonding Wire. We manufacture very fine gold, aluminum and copper wire used in the wire bonding process. This wire is bonded to the chip surface and package substrate by the wire bonder and becomes a permanent part of the customer semiconductor package. We produce wire to a wide range of specifications, which can satisfy most wire bonding applications across the spectrum of semiconductor packages.

Expendable Tools. Our expendable tools include a wide variety of capillaries, wedges, die collets and wafer saw blades. The capillaries and wedges actually attach the wire to the semiconductor chip, allow a precise amount of wire to be fed out to form a permanent wire loop, then attach the wire to the package substrate, and finally cut the wire so that the bonding process can be repeated again. Die collets are used to pick up and place die into packages before the wire bonding process begins. Our hub blades are used to cut silicon wafers into individual semiconductor die.

#### Test Interconnect

We offer a broad range of fixtures used to temporarily contact a semiconductor device while it is still in the wafer format (wafer probing), thereby providing electrical connections to automatic test equipment. We also offer test sockets used to test the final semiconductor package (package or final testing). Our principal test interconnect products are:

*Probe cards*. Probe cards consist of complex, multilayer printed circuit boards (PCB) upon which are attached numerous probe needles designed to make temporary contact to each of the bond pads or bumps on a die while the die is still in a wafer format, providing electrical connections to automatic test equipment.

Automatic Test Equipment (ATE) interface assemblies. ATE interface assemblies typically consist of electro-mechanical assemblies, electrical contactors and intricate multilayer PCBs, which mechanically and electrically connect to the ATE test prober and carry electrical signals to a probe card, and ultimately the semiconductor device under test.

Test sockets. Test sockets hold packaged semiconductor devices while making electrical connections to their leads through spring loaded contacts.

Changes in the design of a semiconductor device often require changes in the probe card, test socket and, in certain cases, the ATE interface assembly used to test that semiconductor. Customers generally purchase new versions of these custom-designed products each time there is a design change in the semiconductor being tested. Changes in semiconductor design and processes drive improvements in test interconnect technology in order to support significant increases in the number and density of bond pads or leads being tested and the speed of the electrical signals being tested.

#### Customers

Our major customers include large semiconductor manufacturers and their subcontract assemblers and vertically integrated manufacturers of electronic systems. Customers may vary from year-to-year based on their capital investment and operating expense budgets. The chart below shows our top ten end-use customers, based on net sales, for each of the last three fiscal years:

Fiscal 2002	Fiscal 2003	Fiscal 2004
1. Advanced Semiconductor	1. Advanced Semiconductor	1. Advanced Semiconductor
Engineering *	Engineering*	Engineering*
2. ST Microelectronics	2. ST Microelectronics	2. ST Microelectronics
3. Siliconware Precision Industries	3. Intel	3. Texas Instruments
4. Intel	4. Amkor Technologies	4. Intel
5. Texas Instruments	5. Texas Instruments	5. Siliconware Precision Industries
6. Infineon Technologies	6. Infineon Technologies	6. Spansion
7. Amkor Technologies	7. National Semiconductor	7. National Semiconductor
8. National Semiconductor	8. Philips Electronics	8. ST Assembly Test
9. Samsung	9. ST Assembly Test	<ol><li>Infineon Technologies</li></ol>
10. Philips Electronics	10. Siliconware Precision Industries	10. Amkor Technologies

<sup>\*</sup> Accounted for more than 10% of total fiscal year net sales.

We believe that developing long-term relationships with our customers is critical to our success. By establishing these relationships with semiconductor manufacturers, semiconductor subcontract assemblers, and vertically integrated manufacturers of electronic systems, we gain insight into our customers future IC packaging strategies. This insight 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 manufacturers, semiconductor subcontract assemblers, and vertically integrated manufacturers of electronic systems, which are primarily located in or have operations in the Asia/Pacific region. Approximately 86% of our fiscal 2004 net sales, 80% of our fiscal 2003 net sales, and 74% of our fiscal 2002 net sales were for delivery to customer locations outside of the United States. The majority of these foreign sales were destined for customer locations in the Asia/Pacific region, including Taiwan, Malaysia, Singapore, Korea, Japan, China and the Philippines. We expect sales outside of the United States to continue to represent a majority of our future revenues.

A majority of our manufacturing operations also are in countries other than the U.S., including major manufacturing operations located in Singapore, Israel, and China and other smaller facilities in France, Japan, Scotland, Switzerland and Taiwan. 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, terrorism, war, civil disturbances, expropriation, and other events that may limit or disrupt markets.

#### **Sales and Customer Support**

We believe that providing comprehensive worldwide sales, service, training and support are important competitive factors in the semiconductor equipment industry, and we manage these functions through our global customer operations group. Some of these operations are focused on wire bonders and packaging materials, and others focus on test related products. We rely on a combination of a direct sales force, manufacturers representatives and distributors for the sale of our various product lines. In order to support our customers whose semiconductor assembly operations are located primarily outside of the United States, we have sales, service, and support personnel based in China, Hong Kong, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Europe, and applications labs in Singapore, Japan, Israel, Taiwan, and Germany. We provide timely customer service and support by positioning our service representatives and spare parts near customer facilities, and afford 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, 2004, we had a backlog of customer orders totaling \$59.7 million, compared to \$104.0 million at June 30, 2004 and \$59.9 million at September 30, 2003. Our backlog consists of customer orders which are scheduled for shipment within 12 months. Virtually all orders are subject to cancellation, deferral or rescheduling by the customer with

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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. For example, on August 10, 2004, we announced that discussions with customers indicated a general slowing in the rate of semiconductor growth. As a result, some of these customers requested that we delay the shipment of wire bonders previously ordered and included in our backlog of customer orders at June 30, 2004.

### Manufacturing

The Company believes excellence in manufacturing can create a competitive advantage, both through lower costs and superior responsiveness. In order to achieve these goals, we manage our manufacturing operations through a single organization and are trending to fewer, larger factories to take advantage of economies of scale and the cost savings available in low labor cost areas.

Equipment. Our equipment manufacturing activities consist primarily of integrating outsourced parts and subassemblies, and testing the finished product to customer specifications. During fiscal 2004, most of our equipment manufacturing took place in Singapore, with a small number of machines built in Willow Grove, Pennsylvania. We believe the outsourcing model enables us to minimize our fixed costs and capital expenditures and focus on product differentiation through technology innovations in system design and manufacturing quality control. Just-in-time inventory management has reduced our manufacturing cycle times and reduced our on-hand inventory requirements. We have received ISO 9001 certification for our equipment manufacturing facility in Singapore.

Packaging Materials. We manufacture expendable tools at facilities in Yokneam, Israel and Suzhou, China, and bonding wire at facilities in Singapore and Thalwil, Switzerland. We manufacture blades for wafer sawing in Santa Clara, California. Our bonding wire facility in Switzerland has received ISO 9001 certification; our bonding wire facility in Singapore has received QS9000 and ISO 14001 certifications; our blade facility in California has received ISO 9002 certification; our bonding tools facility in Yokneam, Israel has received ISO 9001 and ISO 14001 certifications; and our bonding tools facility in Suzhou, China has received ISO 9001 and ISO 14001 certifications.

Test Interconnect Products. We manufacture test probe cards in various facilities located in: Gilbert, Arizona; Hayward and San Jose, California; Hsin Chu, Taiwan; East Kilbride, Scotland; Singapore; Suzhou, China; and Corbeil, France. We manufacture ATE interface assemblies in Gilbert, Arizona and test sockets in Hayward, California and Singapore. As part of our ongoing cost reduction activities, we sold our ATE test board fabrication assets in Dallas, Texas in the third quarter of fiscal 2003 and moved to an outsource strategy for these components, and in fiscal 2004 we closed a test manufacturing facility in Meyreuil, France.

## **Research and Product Development**

Many of our customers generate technology roadmaps describing the future manufacturing capability requirements needed to support their product development plans. Our research and product development activities are organized so that our products anticipate our customers requirements. This can happen either through continuous improvement of our existing products, including upgrades for products already installed in customers—facilities, or through the creation of next-generation products. Examples of our continuous improvement strategy include the Nutek and Maxum—Plus wire bonders mentioned above—both improvements of the Maxum—our advanced epoxy line of probe cards, and our DuraCap line of bonding tools. Major next-generation development is underway for our wire bonder, probe card and test socket product lines. Whether we proceed via continuous improvement, or via next-generation technology development, our goal is technology leadership in each of our major product lines.

Our net expenditures for research and development totaled approximately \$34.6 million, \$38.1 million, and \$51.9 million during our fiscal years ended September 30, 2004, 2003 and 2002, respectively.

## Competition

The market for semiconductor equipment, packaging materials, and test interconnect products is intensely competitive. Significant competitive factors in the semiconductor equipment market include price, as well as speed/throughput, production yield, and customer support, each of which contribute to lower the overall cost per package being manufactured. Our major equipment competitors include:

Wire bonders: ASM Pacific Technology and Shinkawa

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Significant competitive factors in the semiconductor packaging materials industry include performance, price, delivery, product life, and quality. Our significant packaging materials competitors include:

Bonding tools: Gaiser Tool Co., Small Precision Tools, Inc. and PECO

Saw blades: Disco Corporation

Bonding wire: Tanaka Electronic Industries, Sumitomo Metal Mining, Heraeus, and Nippon Metal.

Our test products face competition from a few large international firms as well as many small regional firms. Significant competitive factors in the test interconnect industry include performance, price, delivery time, product life, and quality. Our significant competitors include:

Wafer test: FormFactor, Inc., Japan Electronic Materials, and Micronics Japan Company

Package test: Everett Charles, Synergetix, Johnstech International, Enplas Semiconductor

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 have greater financial, engineering, manufacturing and marketing resources than we have. Some of our competitors are Asian and European 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.

## **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. We believe that our portfolio of patents will have more value in the future but 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 trade secrets and proprietary software. As long as we rely on trade secrets and unpatented knowledge, including software, to maintain our competitive position, we cannot assure you that competitors may not independently develop similar technologies and possibly obtain patents containing claims applicable to our products and processes. Our ability to defend ourselves against these claims may be limited. 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, or that they can be enforced.

#### **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 upon us 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, 2004, we had 3,186 permanent employees and 108 temporary and contract workers worldwide. The only employees represented by a labor union are the bonding wire employees in Singapore. 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 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.

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## **Property**

Our major operating facilities are described in the table below:

				Lease
	Approximate		Products	Expiration
Facility	Size	Function	Manufactured	Date
Willow Grove,	220,000 sq.ft. (1)	Corp. headquarters,	Wedge, large area bonders	May 2006
Pennsylvania		manufacturing, technology		
		center, sales and service		
Suzhou, China	134,700 sq.ft. (1)	Manufacturing	Capillaries, probe cards	October 2007
Singapore	84,800 sq.ft. <sup>(1)</sup>	Manufacturing, technology	Wire bonders, probe cards	August 2005
		center, assembly systems		
Gilbert, Arizona	83,000 sq.ft. <sup>(1)</sup>	Manufacturing, sales and	Probe cards, ATE interface assemblies	May 2012
		service		
Yokneam, Israel	53,800 sq.ft. <sup>(2)</sup>	Manufacturing, technology	Capillaries, wedges, die collets	N/A
		center		
Singapore	38,400 sq.ft. (1)	Manufacturing	Bonding wire	May 2006
Hsin Chu,	36,800 sq.ft <sup>(1)</sup>	Manufacturing	Probe cards	July 2007
Taiwan				
Hayward,	35,900 sq.ft. (1)	Manufacturing, sales and	Test sockets, contactors	September 2005
California		service		
San Jose,	34,100 sq.ft. (1)	Manufacturing, sales and	Probe cards	August 2007
California		service		
Thalwil,	15,100 sq.ft. (1)	Manufacturing	Bonding wire	(3)
Switzerland				

## Switzerland

- (1) Leased.
- Owned.
- (3) Cancelable semi-annually upon six months notice.

We also rent space for sales and service offices in: Santa Clara, California; Southbury, Connecticut; Austin, Texas; China; Germany; Hong Kong; Japan; Korea; Malaysia; the Philippines; Taiwan; and Thailand and operate smaller manufacturing facilities in Santa Clara, California;

France; and Scotland. We believe that our facilities generally are in good condition.

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#### MANAGEMENT

#### **Directors and Executive Officers**

Brian R. Bachman has been a director of our Company since 2003. His present term expires in 2008. Mr. Bachman is a private investor. From 2000 to 2002, Mr. Bachman served as Chief Executive Officer and Vice Chairman of Axcelis Technologies, which produces equipment used in the fabrication of semiconductors, and from 1996 to 2000, he served as Senior Vice President and Group Executive of Eaton Corporation, an industrial manufacturing company. From 1991 to 1995, Mr. Bachman served as Vice President and Business Group General Manager of Philips Semiconductors, a semiconductor supplier. He currently serves as a director of Keithley Instruments and Ultra Clean Technology. Mr. Bachman is 59 years old.

Philip V. Gerdine, Ph.D. (since 1964) and Certified Public Accountant (since 1973) has been a director of our Company since 2000. His present term expires in 2008. Mr. Gerdine is an independent consultant in finance and international operations. From 1988 to September 1998, Mr. Gerdine served as Executive Director of Siemens Aktiengesellschaft, a German multinational company that designs, develops and manufactures systems and products for the communications, power generation and distribution, electronics, medical equipment and allied industries. Mr. Gerdine was also Managing Director of The Plessey Company, PLC, a British engineering firm which manufactured telecommunications products for the global market and defense electronics and semiconductor products largely for the commonwealth markets. He also has been Manager of Acquisitions and Mergers for General Electric Company and has held other senior management positions with Price Waterhouse and The Boston Consulting Group. Mr. Gerdine has held teaching positions in finance and accounting at Fordham Graduate School and other institutions. Mr. Gerdine also serves as a director of Applied Materials, Inc. Mr. Gerdine is 65 years old.

C. Scott Kulicke has been the Chief Executive Officer of our Company since 1979 and Chairman of the Board of Directors since 1984. His present term as a director expires in 2007. He first became an officer of the Company in 1976 and has held a number of executive positions with us since that time. Mr. Kulicke is 55 years old.

John A. O Steen has been a director of our Company since 1988. His present term expires in 2006. Mr. O Steen served as Executive Vice President, Business Development (March, 2003 May, 2004), Executive Vice President of Operations (July 1998 to February 2003) and Executive Vice President (January to June 1998) of Cornerstone Brands, Inc., a consumer catalog company. From 1991 to 1998, Mr. O Steen served as Chairman and Chief Executive Officer of Cinmar, L.P., a mail order catalog company that was acquired by the predecessor of Cornerstone Brands in September 1995. Before that time, Mr. O Steen served as President, Chief Executive Officer and a director of Cincinnati Microwave, Inc., a manufacturer of electronic products. He currently serves as a director of Cornerstone Brands, Inc. and Riggs Heinrich Media, Inc. Mr. O Steen is 60 years old.

Allison F. Page has been a director of our Company since 1962. His present term expires in 2005. Mr. Page is a retired partner in the Philadelphia law firm of Pepper Hamilton LLP. Mr. Page is 81 years old.

MacDonell Roehm, Jr. has been a director of our Company since 1984. His present term expires in 2006. Mr. Roehm is Chairman and Chief Executive Officer of Crooked Creek Capital LLC, a provider of strategic, operational and financial restructuring services, a position he has held since 1998. From September 2002 to April 2003, Mr. Roehm also served as Chief Executive Officer of CH4 Gas Limited, a natural resources company. From 2000 to 2001, Mr. Roehm served as Chairman and Chief Executive Officer of Mackenzie-Childs Ltd., a manufacturer and retailer of furniture and home accessories. Mr. Roehm was hired by Mackenzie-Childs Ltd. to implement remedial action plans, and on November 28, 2000, Mackenzie-Childs Ltd. filed a voluntary petition under Chapter 11 of the United States Bankruptcy Code, seeking

reorganization to provide a framework under which those remedial action plans could be executed. From 1999 to 2000, Mr. Roehm served as Chairman of Australian Ventures LLC, a private equity fund. From 1994 until 1998, Mr. Roehm served as Chairman, President and Chief Executive Officer of Bill s Dollar Stores, Inc., a chain of retail convenience stores. Before that time, he served as Managing Director of AEA Investors, Inc., a private investment firm. Mr. Roehm also serves as a director of CH4 Gas Limited Mr. Roehm is 65 years old.

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Barry Waite has been a director of our Company since 2003. His present term expires in 2007. From May 1998 until his retirement in May 2002, Mr. Waite served as President and Chief Executive Officer of Chartered Semiconductor, a major wafer foundry. From 1982 to 1998, Mr. Waite held positions of increasing responsibility with Motorola Corporation, Semiconductor Products Sector, including Senior Vice President and General Manager, Europe, Middle East and Africa (1997 to 1998) and Senior Vice President and General Manager Microprocessor and Memory Technology Group (1993-1997). Mr. Waite serves as a director of ZETEX PLC and is senior advisor to Investor Growth Capital, a New York investment fund. Mr. Waite is 56 years old.

C. William Zadel has been a director of our Company since 1989. His present term expires in 2005. In December of 2004, Mr. Zadel retired from Mykrolis Corporation. From August of 2001 until December of 2004, Mr. Zadel was Chairman and Chief Executive Officer of Mykrolis Corporation, a multinational company focused on developing, manufacturing and marketing technically advanced filtration, purification and control products for the global semiconductor industry. Mykrolis is the former microelectronics division of Millipore Corporation. Before becoming Chief Executive Officer of Mykrolis at its separation from Millipore in August 2001, Mr. Zadel was Chairman and Chief Executive Officer of Millipore since April of 1996. He currently serves as a director of Matritech, Inc. Mr. Zadel is 61 years old.

Charles Salmons holds the position of Senior Vice President, Wafer Test. He was appointed to this position in November 2004. He was appointed Senior Vice President, Product Development in September 2002. He joined us in 1978, and has held positions of increasing responsibility throughout the accounting, engineering and manufacturing organization. Mr. Salmons first became an officer of the Company in 1992, and in 1994, he became Vice President of Operations and was named General Manager, Wire Bonder Operations in 1998. He was appointed Senior Vice President, Customer Operations in 1999. Mr. Salmons is 49 years old.

Jack G. Belani holds the position of Vice President of Wire Bonding and Corporate Marketing. He was appointed to this position in November 2004. Before this, he was Vice President of all the Business Units and Marketing and prior to that he was President of the Wire Bonding Division and before that President of XLAM which was our high density substrate group. He became an officer of the Company upon joining us in April 1999 as Vice President and President of our high density substrate group. Before joining us, he served for more than three years in the Worldwide Manufacturing Group of Cypress Semiconductor Corporation, a supplier of integrated circuits for network infrastructure and access equipment, where he was Vice President of Assembly and Packaging when he left to join us. Before Cypress, he was with National Semiconductor Corporation for approximately 18 years in a variety of technical and managerial positions and one year with Advanced Micro Devices as a Bipolar Memory Wafer Fabrication Process Development Engineer. Mr. Belani is 51 years old.

*Maurice E. Carson* holds the position of Vice President, Chief Financial Officer. He was appointed to this position when he joined us in September 2003. From 1996 until he joined us in 2003, Mr. Carson served in various finance positions culminating as the Vice President, Finance and Corporate Controller for Cypress Semiconductor Corporation. Before Cypress he was with Ephigraphx as the Chief Operating Officer. Mr. Carson is 47 years old.

*Bruce Griffing* holds the position of Vice President, Engineering. He was appointed to this position when he joined us in September 2004. From 2001-2003 Dr. Griffing served as Vice President and Chief Technology Officer of DuPont Photomask, a company that provides microimaging solutions. Before DuPont Photomask, Dr. Griffing worked for General Electric from 1979-2001, serving as a Laboratory Manager from 1986 to 2001. Dr. Griffing received his Ph.D in Physics from Purdue University in 1979. Dr. Griffing is 54 years old.

Oded Lendner holds the position of Vice President, Package Test. He was appointed to this position in November 2004. He was appointed to the position of Vice President, World Wide Operations in January 2002. Before this he was President of our Microelectronics division for one year. He joined our Israeli subsidiary in 1989 and has held positions of increasing responsibility throughout our manufacturing organization, and was named Deputy Managing Director, Operations in Israel in 1993. He relocated to the United States and first became an officer of the Company in 1996 as the Vice President, Operations for the Equipment group. In 1999, he became Vice President, Ball Bonder Business unit and Managing

Director of K&S Singapore. Mr. Lendner is 44 years old.

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### **Executive Compensation**

#### **Summary Compensation Table**

The following table sets forth information with respect to the compensation received by the Chief Executive Officer and the four other most highly compensated executive officers of the Company who were serving as executive officers at September 30, 2004 (collectively, the named executive officers) for the fiscal year ended September 30, 2004 (Fiscal 2004), as well as the compensation received by each such individual for the Company s previous two fiscal years (Fiscal 2003) and Fiscal 2002, respectively), if applicable.

						Lor	ıg Te	rm		
		Aı	<b>Annual Compensation</b>			<b>Compensation Awards</b>				
						Securities				
Name and	Fiscal			Otl	ner Annual	Underlying	4	All Other		
Principal Position	Year	Salary	Bonus <sup>(1)</sup>	Compensation <sup>(2)</sup>		Compensation <sup>(2)</sup>		Options	Compensation (3)	
C. Scott Kulicke										
Chairman of the Board and	2004	\$ 486,663	\$ 337,577	\$	20,973	76,000	\$	19,500		
Chief Executive Officer	2003 2002	\$ 424,578 \$ 424,580		\$ \$	11,489 16,596	81,000 111,500	\$ \$	18,000 16,500		
Oded Lendner	2004	\$ 306,433	\$ 102,119	\$	11,122	41,000	\$	14,142		
Vice President, Package Test	2003 2002	\$ 272,689 \$ 278,458		\$ \$	8,982 13,247	41,000 26,200				
Charles Salmons										
Senior Vice President,	2004 2003	\$ 272,512 \$ 248,553	\$ 140,811	\$ \$	3,660 12,030	41,000 31,000	\$ \$	21,058 18,966		
Wafer Test	2003	\$ 212,498		\$	11,850	42,000	\$	13,976		
Jagdish (Jack) G. Belani										
Vice President of Wire Bonding and	2004 2003	\$ 269,704 \$ 238,618 \$ 204,000	\$ 142,762	\$ \$	4,077 12,218	41,000 31,000	\$	7,224 3,860		
Corporate Marketing Maurice E. Carson <sup>(4)</sup>	2002	\$ 204,000				43,000	\$	4,402		
Vice President and Chief Financial Officer	2004 2003	\$ 246,926 \$ 4,519	\$ 127,301	\$ \$	3,646 29	100,000	\$	71,928		

<sup>(1)</sup> These amounts represent incentive payments to the named executive officers as participants in the Company s Executive Incentive Compensation Plan for the fiscal year indicated.

These amounts represent the (i) imputed taxable value of Company automobiles used by the executive officers and/or automobile allowances, (ii) the taxable value of certain life insurance benefits provided to the named executive officers, and (iii) for Mr. Kulicke and Mr. Lendner, the difference between the purchase price paid by the executive officer and the fair value of automobiles purchased from the

Company in Fiscal 2004 in the amounts of \$16,050 and \$7,375, respectively. The Company discontinued its program of providing automobiles or automobile allowances to officers, effective January 1, 2004.

These amounts represent the Company s matching contribution to its 401(k) Incentive Savings Plan for each of the named executive officers, and in Fiscal 2004, reimbursed relocation costs for Mr. Carson.

(4) Mr. Carson joined the Company in September, 2003.

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#### **Option Grants in Fiscal 2004**

The following table sets forth information with respect to stock option grants by the Company to the named executive officers in Fiscal 2004.

Potential Realizable Value

at Assumed Annual Rates of

Stock

		Individual Grants						iation for erm <sup>(3)</sup>
	Number of	% of Total			,			
	Shares	Options						
	Underlying	Granted to						
	Options	<b>Employees in</b>	Exe	cise Price	Expiration			
Name	Granted (1)	Fiscal Year (2)	Pe	r Share	Date	5%		10%
	76,000	2.70	Ф	10.05	10/7/2012	Φ 575 040	Ф	1 450 540
C. Scott Kulicke	76,000	3.7%	\$	12.05	10/7/2013	\$ 575,942		1,459,549
Oded Lendner	41,000	2.0%	\$	12.05	10/7/2013	\$ 310,705	\$	787,388
Charles Salmons	41,000	2.0%	\$	12.05	10/7/2013	\$ 310,705	\$	787,388
Jagdish (Jack) G. Belani	41,000	2.0%	\$	12.05	10/7/2013	\$ 310,705	\$	787,388
Maurice E. Carson		N/A		N/A	N/A	N/A		N/A

The options granted to named executive officers in Fiscal 2004 were granted under the Company s 2001 Employee Stock Option Plan and generally become exercisable commencing one year from the date of grant in installments of 25% per year.

## Aggregated Option Exercises in Fiscal 2004 and 2004 Fiscal Year-End Option Values

The following table sets forth information with respect to the aggregate option exercises by each named executive officer in Fiscal 2004 and the value of unexercised in-the-money options held by each named executive officer at the end of Fiscal 2004, respectively.

Shares Number of Shares Value of Unexercised

<sup>(2)</sup> The Company granted options to employees to purchase a total of 2,050,554 shares during Fiscal 2004.

<sup>(3)</sup> These amounts represent hypothetical gains that could be achieved for the respective options if exercised at the expiration date of the option. These gains are based on assumed rates of stock appreciation of 5% and 10% compounded annually from the date the respective options were granted to their expiration date.

	Acquired on Exercise			Underlying		In-the-Money Options		
				Unex	at Fiscal Year-End <sup>(1)</sup>			
				Options at Fiscal				_
				Year-End				
Name		Valu	ie Realized	Exercisable	Unexercisable	Exercisable	Une	exercisable
C. Scott Kulicke	20.000	\$	121,974	774,950	220,150	\$ 234,027	\$	164,025
Oded Lendner	.,,,,,,	•	,- ,-	102,595	83,825		\$	62,775
Charles Salmons				144,590	95,650	\$ 20,925	\$	62,775
Jagdish (Jack) G. Belani				116,850	94,550	\$ 20,925	\$	62,775
Maurice E. Carson				25,000	75,000			

<sup>(1)</sup> In-the-money options are those where the fair value of the underlying shares exceeds the exercise price of the option. The closing price of the Company s Common Shares on September 30, 2004, the last trading day during Fiscal 2004, was \$5.65 per share.

#### **Pension Plan**

The Company has a tax-qualified defined benefit pension plan, which covered U.S. employees who had reached age 21 and completed one year of service. Effective December 31, 1995, benefit accruals under the Company s pension plan were frozen. Retirement benefits under this pension plan are determined under a formula based on length of service and average compensation in the three consecutive calendar years during the ten year period ended December 31, 1995, producing the highest average (subject to certain Internal Revenue Code limits). Assuming the individual survives until age 65 and begins to receive payments at age 65 in the form of an annuity, the named executives would receive the following annual amounts under the pension plan: C. Scott Kulicke - \$57,996; Charles Salmons - \$22,097; and Jagdish G. (Jack) Belani, Maurice E. Carson, and Oded Lendner - \$0.

#### **Employment Contracts, Termination of Employment and Change in Control Arrangements**

The Company has Termination of Employment Agreements with its executive officers which provide that in the event of certain changes in control, as defined in the agreements, the officer who is a party to such agreement and whose employment terminates, other than voluntarily or for cause, within 18 months after such change in control, will be entitled to termination pay equal to the lesser of a specified number of months target total cash compensation (base salary plus incentives) for the year in which the change in control occurs or \$10 less than the amount which would subject the officer to excise tax with respect to such payment under Section 4999 of the Internal Revenue Code or would make payment thereof non-deductible by the Company under Section 280G of the Code. Such agreements are all currently scheduled to expire on December 31, 2006, unless extended. The named executive officers Termination of Employment Agreements provide for payment of the following number of months target total cash compensation: Mr. Kulicke, 30 months and Messrs. Belani, Carson, Lendner, and Salmons, 18 months.

Under the Company s 2001 Employee Stock Option Plan ( 2001 Plan ), the 1998 Employee Stock Option Plan ( 1994 Plan ), in the event of a change in control of the Company (as defined in those plans), all outstanding options become fully vested and exercisable. Under the Company s 1997 Non-Qualified Stock Option Plan for Non-Employee Directors (the 1997 Director Plan ), if the Company is a party to any merger in which it is not the surviving entity, or any consolidation or dissolution, all outstanding options will terminate and the optionee will receive, in cash, from the Company an amount equal to the fair market value of the Company s 1988 Employee Stock Option Plan and 1988 Non-Qualified Stock Option Plan for Non-Officer Directors (the 1988 Director Plan ), if the Company is a party to any merger in which it is not the surviving entity, or any consolidation or dissolution, all outstanding options will terminate and the optionee will receive, in cash, from the Company an amount equal to the fair market value of the Common Shares subject to then exercisable options less the amount which would be required to exercise such options.

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#### **Compensation of Directors**

In Fiscal 2004, the Board of Directors met seven times. During Fiscal 2004, Directors who were not officers of the Company received a quarterly retainer of \$3,000, plus \$2,000 for each meeting of the Board attended in person and \$1,000 for each telephone meeting of the Board attended. Committee Chairmen also were paid an annual retainer of \$2,000, and committee members were paid \$1,000 for each committee meeting not held on the date of a Board meeting. Effective October 1, 2004, Directors who are not officers of the Company receive a quarterly retainer of \$5,000, plus \$2,000 for each meeting of the Board attended in person and \$1,000 for each telephone meeting of the Board attended. Committee Chairmen also are paid an additional annual retainer of \$5,000, and committee members are paid \$1,000 for each committee meeting. In addition, Directors are paid \$1,000 for each executive session not held on the date of a Board meeting. Directors receive options to acquire 10,000 of the Company s common shares upon joining the Board of Directors, with an exercise price equal to the fair market value on the grant date.

Each member of the Board who is not also an officer or employee of the Company is eligible to participate in the 1988 and 1997 Director Plans. Pursuant to the 1988 Director Plan (which terminated in 1998), options to purchase 5,000 Common Shares were automatically granted to each eligible director on the last day of each February on which the Company s shares were publicly traded through 1998. In February 1999, a similar grant was made pursuant to the 1997 Director Plan, which provides for such grants through 2008. As a result of the two-for-one stock split effective on July 31, 2000, grants under the 1997 Director Plan were increased to 10,000 Common Shares beginning with the grant made in February 2001. The exercise price of all such options is equal to 100% of the fair market value of the Company s Common Shares on the date of grant. All options granted under the 1988 Director Plan and options granted under the 1997 Director Plan before February 13, 2001 become exercisable in 20% annual increments commencing on the first anniversary of the date they are granted. Options granted under the 1997 Director Plan after February 13, 2001 become exercisable in 25% annual increments commencing on the first anniversary of the date they were granted.

## **Compensation Committee Interlocks and Insider Participation**

During Fiscal 2004, the Management Development and Compensation Committee was comprised of Messrs. John A. O Steen, Chairman, Brian R. Bachman, Barry Waite and C. William Zadel, all of whom are independent directors. During Fiscal 2004, no interlocking relationship existed between any member of the Board or executive officer of the Company and any member of the board of directors or compensation committee of any entity.

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#### LEGAL PROCEEDINGS

From time to time, we are a plaintiff or defendant in various cases arising out of our business. We cannot assure you of the results of any 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.

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#### PRINCIPAL SHAREHOLDERS

The following table sets forth information as of December 1, 2004 (unless otherwise indicated in the notes below) regarding the beneficial ownership of our common stock by: (i) each shareholder known to us to be the beneficial owner, as defined in Rule 13d-3 under the Exchange Act, of more than 5% of our common stock, based upon our records or information publicly filed with the Securities and Exchange Commission, (ii) each director of the Company, (iii) each of the executive officers of the Company named in the Summary Compensation Table herein and (iv) the directors and all current executive officers of the Company as a group. Each of the shareholders named below has sole voting power and sole investment power with respect to the shares indicated as beneficially owned, unless otherwise indicated.

**Common Shares** 

	Beneficially ( On Decemb	Owned
Name and address of		
Beneficial Owner	Number	Percent
Brian R. Bachman	1,000	*
Philip V. Gerdine	$15,100_{(1)(2)}$	*
C. Scott Kulicke	$1,500,762_{(1)(2)}$	2.9
John A. O Steen	$63,000_{(1)(2)}$	*
Allison F. Page	44,040 <sub>(1)</sub>	*
MacDonell Roehm, Jr.	$79,000_{(1)}$	*
Barry Waite	2,500(1)	*
C. William Zadel	45,000(1)	*
Charles Salmons	210,084 <sub>(1)</sub>	*
Jagdish (Jack) Belani	167,261 <sub>(1)</sub>	*
Maurice E. Carson	$46,450_{(1)}$	*
Oded Lendner	149,609(1)	*
Capital Group International, Inc.  11100 Santa Monica Boulevard		
Los Angeles, CA 90025 (3)	4,837,950	9.4
Fred Alger Management, Inc.  111 Fifth Avenue		
New York, NY 10003 (4)	3,518,694	6.9
Directors and current executive officers as a group		
(consists of 13 persons) (5)	2,338,145	4.4

<sup>\*</sup> Represents less than 1%.

<sup>(1)</sup> Includes or consists of shares subject to outstanding options that are currently exercisable or exercisable within 60 days after December 1, 2004 in the following amounts: Mr. Gerdine (15,000), Mr. Waite (2,500), Mr. Kulicke (788,150), Mr. O Steen (43,000), Mr. Page (43,000), Mr. Roehm (73,000), Mr. Zadel (43,000), Mr. Salmons (204,365), Mr. Belani (166,925), Mr. Carson (45,875), and Mr. Lendner (146,980).

<sup>(2)</sup> Includes shares jointly held with the individual s spouse in the follow amounts: Mr. Gerdine (100), Mr. Kulicke (532,031), and Mr. O Steen (2,000).

<sup>(3)</sup> Based on information provided pursuant to an amendment to Schedule 13G filed jointly by Capital Group International, Inc. and Capital Guardian Trust Company with the Securities and Exchange Commission on February 13, 2004. Capital Group International, Inc. is the

parent holding company of a group of investment management companies that hold investment power and, in some cases, voting

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power over these shares. On the amended Schedule 13G, Capital Group International, Inc. also reported that it does not have investment power or voting power over these shares, but it may be deemed to beneficially own these shares by virtue of Rule 13d-3 under the Securities Exchange Act of 1934.

- (4) Based on information provided pursuant to a statement on Schedule 13G filed with the SEC on February 13, 2004.
- (5) Includes 1,585,990 shares subject to options that are currently exercisable or exercisable within 60 days after December 1, 2004. See also footnote (1) above.

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## 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 herein and incorporated herein by reference.

(in thousands, except per share amounts)

	2000	2001	2002	2003	2004
Statement of Operations Data:					
Net sales:					
Equipment	\$ 692,062	\$ 249,952	\$ 169,469	\$ 198,447	\$ 361,244
Packaging materials	185,570	150,945	157,176	174,471	234,690
Test		116,890	114,698	104,882	121,877
Corporate and other (1)		595	222	135	
Total net sales	877,632	518,382	441,565	477,935	717,811
Cost of goods sold:					
Equipment Equipment	419,732	166,359	142,965	129,092	208,862
Packaging materials	130,548	110,570	118,080	132,779	182,658
Test	220,210	84,401	79,686	87,856	95,286
Corporate and other (1)		,	14	,	ĺ
Total cost of goods sold (2)	550,280	361,330	340,745	349,727	486,806
Operating expenses:					
Equipment	120,244	105,609	91,966	71,678	59,071
Packaging materials	32,876	31,088	32,578	26,684	21,942
Test		66,148	130,077	44,218	48,107
Corporate and other (1)	29,380	34,234	66,883	15,539	17,940
Total operating expenses (2)	192.500	227.070	221 504	150 110	147.060
Total operating expenses	182,500	237,079	321,504	158,119	147,060
Income (loss) from operations:					
Equipment	152,086	(22,016)	(65,462)	(2,323)	93,311
Packaging materials	22,146	9,287	6,518	15,008	30,090
Test		(33,659)	(95,065)	(27,192)	(21,516)
Corporate and other (1)	(29,380)	(33,639)	(66,675)	(15,404)	(17,940)
(2)					
Income (loss) from continuing operations (2)	144,852	(80,027)	(220,684)	(29,911)	83,945
Interest income (expense), net	4,782	(5,542)	(14,941)	(16,491)	(9,357)
Equity in loss of joint venture (3)	(1,221)	· ·	Í	,	,
Charge on early extinguishment of debt	(1,221)				(10,510)
Other income and minority interest		8,022	2,010		

Income (loss) from continuing operations before taxes and cumulative effect of change in accounting principle 148,413 (77,547) (233,615) (46,402)