KULICKE & SOFFA INDUSTRIES INC Form S-3/A

October 02, 2001

As filed with the Securities and Exchange Commission on October 2, 2001

Registration No. 333-69744

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3/A

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

KULICKE AND SOFFA INDUSTRIES, INC. (Exact Name of Registrant as Specified in Its Charter)

Pennsylvania (State or Other Jurisdiction of Incorporation or Organization)

23-1498399 (I.R.S. Employer Identification Number)

2101 Blair Mill Road Willow Grove, PA 19090 (215) 784-6000 (Address, Including Zip Code, and Telephone
Number, Including Area Code, of Registrant's

(Els), 764 6000

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Principal Executive Offices)

Clifford G. Sprague Senior Vice President and Chief Financial Officer 2101 Blair Mill Road Willow Grove, PA 19090 (215) 784-6000

Agent For Service)

COPY TO: H. John Michel, Jr. Drinker Biddle & Reath LLP One Logan Square 18th and Cherry Streets Philadelphia, PA 19103-6996

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered

pursuant to dividend or interest reinvestment plans, please check the following box. $[\]$

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [_]

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [_]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. $[_]$

Subject to Completion, dated October 2, 2001

Prospectus

\$125,000,000

Kulicke and Soffa Industries, Inc. 5 1/4% Convertible Subordinated Notes due 2006 and the Common Stock issuable upon conversion of the Notes

We issued the notes in a private placement in August 2001. 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 before maturity into common stock at an initial conversion ratio of 50.6401 shares per \$1,000 principal amount of notes, subject to adjustment, before August 15, 2006. We will pay interest on the notes on August 15 and February 15 of each year, beginning on February 15, 2002. The notes will mature on August 15, 2006, unless earlier converted or redeemed.

We may redeem all or a portion of the notes on or after August 19, 2004. In addition, the holders may require us to repurchase the notes if we experience a fundamental change before August 15, 2006.

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 October 1, 2001 was \$10.20 per share.

The securities offered hereby involve a high degree of risk. 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 , 2001

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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 thereto, included or incorporated by reference in this prospectus, before making an investment decision.

We design, manufacture and market capital equipment, packaging materials and test interconnect solutions and provide flip chip bumping services for sale to companies that manufacture and assemble semiconductor devices. We also service, maintain, repair and upgrade assembly equipment, license our flip chip bumping process technology and are developing high density interconnect substrates. Our business is divided into four segments: equipment, packaging materials, test interconnect solutions and advanced packaging technology.

Our principal capital equipment product line is our family of wire bonders,

which are used to connect very fine wires, typically made of gold or aluminum, between the bonding pads on semiconductor die and the leads on an integrated circuit (IC) package to which the die has been attached. We design, manufacture and market a wide range of packaging materials to semiconductor device assemblers, including very fine (typically 0.001 inches in diameter) gold, aluminum and copper wire, capillaries, wedges, die collets and saw blades, all of which are used in the semiconductor packaging process. We provide a broad range of products used to test semiconductors during wafer fabrication and after they have been assembled and packaged. Most of our test interconnect products are custom designed or customized for a specific semiconductor or application. Through our wholly-owned subsidiary, Flip Chip Technologies, LLC, we license our flip chip technology, provide wafer bumping services and market a wafer level chip scale package named UltraCSP. Our X-LAM business unit is developing high density interconnect substrates using flip chip and advanced wire bonding interconnection techniques.

As used in this prospectus, "Kulicke & Soffa," "Company;" "we," "our," "ours" and "us" refers to Kulicke and Soffa Industries, Inc. and its consolidated subsidiaries, except when the context otherwise requires or as otherwise indicated and not to the selling securityholders.

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. Our telephone number is (215) 784-6000.

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THE OFFERING

Securities Offered	\$125,000,000 principal amount of 5 1/4% Convertible Subordinated Notes due 2006.
Maturity Date	August 15, 2006.
Interest	5 1/4% per annum on the principal amount, payable semi-annually in arrears in cash on February 15 and August 15 of each year, beginning February 15, 2002.
Conversion	You may convert each note into shares of our common stock at a conversion ratio of 50.6401 shares per \$1,000 principal amount of notes, subject to adjustment, prior to the final maturity date.
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 4 3/4% Convertible Subordinated Notes due 2006. As of September 1, 2001, we had no senior indebtedness outstanding. Neither we nor our
	subsidiaries are prohibited from incurring debt, including senior indebtedness, under the indenture.
Sinking Fund	None.

Provisional Redemption..... We may redeem the notes in whole or in part at

any time prior to August 19, 2004 at a redemption price equal to \$1,000 per \$1,000 aggregate principal amount of notes if:

- . the closing price of the common stock has exceeded 150% of the conversion price for at least 20 trading days in any consecutive 30day trading period; and
- . the shelf registration statement covering resales of the notes and the common stock is effective and expected to remain effective for the 30 days following the redemption date.

If we redeem the notes under these circumstances, we will make an additional payment equal to the total value of the aggregate amount of the interest otherwise payable on the notes from the last day through which interest was paid on the notes, or August 15, 2001 if no interest has been paid, through August 19, 2004. We must make these payments on all notes called for redemption, including notes converted after the date we mailed the notice.

Non-Provisional

We may redeem any of the notes on or after August We may redeem the notes either in whole or in part at redemption prices declining from 102.100% of their principal amount in 2004 to 100% in 2006, plus accrued and unpaid interest.

Fundamental Change...... If a fundamental change (as described under "Description of Notes--Redemption at Option of the Holder") occurs prior to 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.

Ratio of Earnings to Fixed

The ratio of earnings to fixed charges for fiscal Charges...... 1996, 1997, 1998 and 2000 was 5X, 18X, 2X and 16X respectively. We would have had to generate additional earnings of \$16.2 million in fiscal 1999 and \$43.4 million in the nine months ended June 30, 2001 to achieve a ratio of 1:1.

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RISK FACTORS

You should carefully consider the risks described below before making an investment decision. The risks described below are not the only ones facing

our company. Additional risks not presently known to us or that we currently deem immaterial 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.

It is particularly important for you to consider the risk factors set forth below and in the documents incorporated herein by reference when you are reading "forward-looking" statements included in this prospectus and the documents incorporated herein by reference. Forward-looking statements relate to our expectations for future events and time periods. Generally, the words "anticipate," "expect," "intend," "believe," "may," and similar expressions identify forward-looking statements. Forward-looking statements are based on current expectations and involve risks and uncertainties, and future events and circumstances could differ significantly from those anticipated by the forward-looking statements.

Risks Related to Our Business

The semiconductor industry as a whole is volatile and is currently experiencing a significant downturn

Our operating results are significantly affected by the capital expenditures of semiconductor manufacturers and assemblers worldwide. Expenditures by semiconductor manufacturers and assemblers depend on the current and anticipated market demand for semiconductors and products that use semiconductors, such as personal computers, telecommunications 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 sharp periodic downturns and slowdowns. These downturns have been characterized by, among other things, diminished product demand, excess production capacity and accelerated erosion of selling prices. This has severely and negatively affected the industry's demand for capital equipment, including the assembly equipment that we manufacture and market and, to a lesser extent, the packaging materials and test interconnect solutions that we sell. The semiconductor industry is in a downturn and we expect conditions to weaken further during the remainder of fiscal 2001 and to remain weak into 2002. This downturn is among the worst we have experienced: orders have been pushed out or cancelled, significantly reducing our backlog, sales have declined rapidly and we have, among other things, undertaken a significant resizing and have deferred capital expenditures. We cannot assure you as to when the current downturn will end or that it will not continue to worsen. This current downturn, like past downturns, has materially and adversely affected our operating results and we expect that it will continue to materially and adversely affect our business, financial condition and operating results in the near term.

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

Terrorist attacks may negatively effect our operations and your investment. 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 of America and manufacturing facilities in the United States, Israel and Singapore. Also, these attacks have disrupted the global insurance and reinsurance industries with the result that we are experiencing delays in renewing some insurance policies and may not be able to obtain insurance at historical levels for all of our facilities. Furthermore, these attacks may

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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. As a result of terrorism, the United States may enter into an armed conflict which could have a further impact on our domestic and international sales, our supply chain, our production capability and our ability to deliver product to our customers. Political and economic instability in some regions of the world may also result and 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.

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, which we expect will continue to be the case. Although these fluctuations are partly due to the volatile nature of the semiconductor industry, they also reflect the impact of other factors. Many of the factors that affect our operating results are outside of our control.

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

- . market downturns;
- . the mix of products that we sell because, for example:
 - -- some packaging materials have lower margins than assembly equipment and test interconnect solutions;
 - -- some lines of equipment are more profitable than others; and
 - -- some sales arrangements have higher margins than others;
- the volume and timing of orders for our products and any order postponements and cancellations by our customers;
- . the cancellation, deferral or rescheduling of orders, because virtually all orders are subject to cancellation, deferral or rescheduling by the customer without prior notice and with limited or no penalties;
- . adverse changes in our pricing, or that of our competitors;
- higher than anticipated costs of development or production of new equipment models;
- . the availability and cost of key components for our products;

- . market acceptance of our new products and upgraded versions of our products;
- our announcement of, or perception by others that we will introduce new or upgraded products, which could cause customers to delay purchasing our products;
- . the timing of acquisitions; 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. Factors that could cause our expenses to fluctuate from period to period include:

- . the timing and extent of our research and development efforts;
- . severance, resizing and other costs of relocating facilities; and
- . inventory write-offs due to obsolescence.

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

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

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

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

We believe that our continued success will depend on our ability to continuously develop and manufacture or acquire new products and product enhancements on a timely and cost-effective basis. We also must introduce these products and product enhancements into the market in response to customers' demands for higher performance assembly equipment and for test interconnect solutions customized to address rapid technological advances in IC and capital equipment designs. Our competitors may develop enhancements to or future generations of competitive products that will offer superior performance, features and lower prices that may render our products non-competitive. The development of new products may require significant capital expenditures over an extended period of time, and some products that we seek to develop may never become profitable. In addition, the commercialization of high density substrates which we are currently developing may require

substantial capital investments for production facilities. In addition, we may not be able to develop and introduce products incorporating new technologies in a timely manner or at a price that will satisfy our customers' future needs or achieve market acceptance.

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

We typically operate our business with a relatively short backlog and order supplies and otherwise plan production based on internal forecasts of demand. Due to these factors, we have in the past, and may again in the future, fail to accurately forecast demand, in terms of both volume and configuration for either our current or next-generation wire bonders. This has led to and may in the future lead to delays in product shipments or, alternatively, an increased risk of inventory obsolescence. If we fail to accurately forecast demand for our products, including assembly equipment, packaging materials, test interconnect solutions and advanced packaging technologies, our business, financial condition and operating results could be materially and adversely affected.

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

Advanced packaging technologies have emerged that may improve device performance or reduce the size of an IC package, as compared to traditional die and wire bonding. These technologies include flip chip and wafer scale packaging. In general, these advanced technologies eliminate the need for wires to establish the electrical connection between a die and its package. For some devices, these advanced technologies have largely replaced wire bonding. We cannot assure you that the semiconductor industry will not, in the future, shift a significant part of its volume into advanced packaging technologies, such as those discussed above. If a significant shift to advanced technologies were to occur, demand for our wire bonders and related packaging materials and test interconnect solutions would diminish.

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One component of our strategy is to develop next generation technologies to allow us to prepare for any eventual decline in the use of wire bonding technology. There are a number of risks associated with our strategy to diversify into new technologies:

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

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

A decline in demand for any of our products could cause our revenues to decline significantly $\$

Prior to our recent acquisitions of businesses in the test interconnect segment, our wire bonders comprised over 50% of our net sales. If demand for, or pricing of, our wire bonders declines because our competitors introduce superior or lower cost systems, the semiconductor industry changes or because of other events beyond our control, our business, financial condition and operating results could be materially and adversely affected. Advanced packaging technologies and test interconnect solutions are less significant as a percentage of our revenues than wire bonders, but any deterioration in the demand for, or prices of, these products would materially and adversely affect our business, financial condition and operating results.

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

The semiconductor manufacturing industry is highly concentrated, with a relatively small number of large semiconductor manufacturers and subcontract assemblers purchasing a substantial portion of semiconductor assembly equipment, packaging materials, test interconnect solutions and flip chip bumping services and technology. Sales to a relatively small number of customers account for a significant percentage of our net sales. In fiscal 2000, sales to Advanced Semiconductor Engineering and Amkor Technologies accounted for 15.3% and 10.1% of our net sales, respectively. In fiscal 1999 no customer accounted for more than 10% of total net sales. However, in fiscal 1998, sales to Intel accounted for 17.6% of our net sales.

We expect that sales of our products to a limited number of customers will continue to account for a high percentage of our net sales for the foreseeable future. If we lose orders from a significant customer, or if a significant customer reduces its orders substantially, these losses or reductions will 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 and, if our suppliers do not deliver their products to us, we may be unable to deliver our products to our customers

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

. loss of control over the manufacturing process;

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- changes in our manufacturing processes, dictated by changes in the market, that 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 contractors and suppliers, which may limit their ability to manufacture and sell subassemblies, components or parts in the volumes we require and at quality levels and prices we can accept;

- reliability and quality problems we experience with certain key subassemblies provided by single source suppliers;
- the exposure of our suppliers and subcontractors to disruption for a variety of reasons, including work stoppage, fire, earthquake, flooding or other natural disasters;
- . delays in the delivery of raw materials or subassemblies, which, in turn, may cause delays in some of 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 in the future, our business, financial condition and operating results would be materially and adversely affected.

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

In recent years, we have broadened our product offerings to include significantly more packaging materials and advanced packaging services and technology. Additionally, during fiscal 2001, we acquired two companies that design and manufacture test interconnect solutions, Cerprobe Corporation and Probe Technology Corporation, and we have combined their operations to create our test division. The success of this combination requires the integration of formerly separate businesses into one another and then into our operating and management structure. If this integration is unsuccessful or slower than anticipated, the benefits of these acquisitions may be deferred or may not be realized. Although our strategy is to diversify our products and services, we may not be able to develop, acquire, introduce or market new products in a timely or cost-effective manner and the market may not accept any new or improved products we develop, acquire, introduce or market.

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

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

In addition, sales and servicing of packaging materials, test interconnect solutions and advanced packaging technologies often require different organizational and managerial skills than sales of traditional wire bonding technology. We cannot assure you that we will be able to develop the necessary

skills to successfully produce and market these different products.

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

The semiconductor equipment, packaging materials, test interconnect solutions and advanced packaging technology industries are intensely competitive. In the semiconductor equipment, test interconnect solutions and advanced packaging technology markets, the significant competitive factors include performance, quality, customer support and price, and in the semiconductor packaging materials industry 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 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 because many of these customers appear to prefer to purchase from local suppliers, without regard to other considerations.

We expect our competitors to improve their current products' performance, and to introduce new products and materials with improved price and performance characteristics. 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 could materially and adversely affect our business, financial condition and operating results. We cannot assure you that we will be able to continue to compete in these or other areas in the future.

We sell most of our products to customers that are located outside of the United States, we have substantial manufacturing operations 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 80% of our net sales for fiscal 1998, 83% of our net sales for fiscal 1999, 91% of our net sales for fiscal 2000 and approximately 60% of our net sales for the nine months ended June 30, 2001 were attributable to sales to customers for delivery outside of the United States. We expect our sales outside of the United States to continue to represent a large portion of our future revenues. Our future performance will depend, in significant part, on our ability to continue to compete in foreign markets, particularly in Asia. Asian economies have been highly volatile, resulting in significant fluctuation in local currencies, and political and economic instability. These conditions may continue or worsen, which could materially and adversely affect our business, financial condition and operating results. We also rely on non-U.S. suppliers for materials and components used in the equipment that we sell and we maintain substantial manufacturing operations in countries other than

the United States, including operations in Israel and Singapore. We manufacture substantially all of our automatic ball bonders in Singapore. In addition, we rely on independent foreign distribution channels for certain product lines. As a result, a major portion of our business is subject to the risks associated with international commerce, such as risks of war and civil disturbances or other events that may limit or disrupt markets; expropriation of our foreign assets; longer payment cycles in foreign markets; international exchange restrictions; the difficulties of staffing and managing dispersed international operations; tariff and currency fluctuations; changing political conditions; foreign governments' monetary policies; and less protective foreign intellectual property laws.

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

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

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

Our success depends in part on our proprietary technology. To protect this technology, we rely principally on contractual restrictions (such as nondisclosure and confidentiality agreements) in our agreements with employees, vendors, consultants and customers and on the common law of trade secrets and proprietary "know-how." We also rely, in some cases, on patent and copyright protection, which may become more important to us as we expand our investment in advanced packaging technologies. We may not be successful in protecting our technology for a number of reasons, including:

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

In addition, our partners and alliances may also have rights to technology that we develop through these alliances. 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. As a result, industry participants often develop products and features similar to those introduced by others, increasing the risk that their products and processes may give rise to claims that they infringe on the intellectual property of others. We may unknowingly infringe on the intellectual property rights of others and incur significant liability for that infringement. If we are found to infringe on the intellectual property rights of others, we could be enjoined from continuing to manufacture, market or use the affected product, or be required to obtain a license to continue manufacturing or using the affected product. A license could be very expensive to obtain or may not be available at all. Similarly, changing our products or processes to avoid infringing the rights of others may be costly or impractical.

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

Some of our customers have received notices of infringement from the Lemelson Medical, Education and Research Foundation Limited Partnership (the "Lemelson Foundation"), alleging that equipment we have supplied to our customers, and processes this equipment performs, infringes on patents held by the Lemelson Foundation. These notices increased substantially in 1998, the year in which the Lemelson Foundation settled its

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suit against the Ford Motor Company, and entered into license agreements with Ford, General Motors and Chrysler. Since the settlement, a number of our customers, including Intel, have been sued by the Lemelson Foundation.

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

storage, use, emission, discharge, transportation and disposal of hazardous material, investigation and remediation of contaminated sites and the health and safety of our employees. Increasingly, public attention has focused on the environmental impact of manufacturing operations and the risk to neighbors of chemical releases from such operations.

Proper waste disposal plays an important role in the operation of our manufacturing plants. In many of our facilities we maintain wastewater treatment systems that remove metals and other contaminants from process wastewater. These facilities operate under effluent discharge 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.

In the future, applicable 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, 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.

Other Risks

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

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

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

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

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Risks of Investing in These Notes

We may incur additional indebtedness in the future, which could increase the risks described above

We have now and will continue to have a significant amount of indebtedness. As of September 1, 2001, we had total indebtedness of approximately \$300.0 million, comprised of \$175.0 million of $4\ 3/4$ % Convertible Subordinated Notes

due 2006 and \$125.0 million of the notes, and we had a debt to equity ratio of approximately 0.8 to 1.0.

Our indebtedness could increase our vulnerability to adverse economic and industry conditions, limit our flexibility in planning for, or reacting to, changes in our business and the semiconductor industry or place us at a competitive disadvantage compared to our competitors with less debt or debt that has more favorable terms.

The terms of the notes do not prohibit us from incurring substantial additional indebtedness in the future, and we may do so. If we add new debt to our current debt levels, the risks described above could increase.

The notes are subordinated in right of payment to other indebtedness

The notes are unsecured obligations subordinated in right of payment to all of our existing and future senior indebtedness. As a result, our assets will be available to pay obligations on the notes only after all senior indebtedness has been paid in full, and we may not have sufficient assets remaining to repay in full all of the notes then outstanding, if any of the following occur:

- . we become insolvent or are forced to liquidate our assets;
- . we default on our senior indebtedness; or
- . the notes are accelerated due to any other event of default.

The notes are also effectively subordinated in right of payment to all of our subsidiaries' indebtedness and other liabilities, including trade payables. The notes are exclusively obligations of Kulicke & Soffa. A substantial portion of our operations are conducted through our subsidiaries. As a result, our cash flow and our ability to service our debt, including the notes, is dependent upon the earnings of our subsidiaries. In addition, we are dependent on the distribution of earnings, loans or other payments by our subsidiaries to us.

Our subsidiaries are separate and distinct legal entities. Our subsidiaries have no obligation to pay any amounts due on the notes. Our subsidiaries are not required to provide us with funds for our payment obligations, whether by dividends, distributions, loans or other payments. In addition, any payment of dividends, distributions, loans or advances by our subsidiaries to us could be subject to statutory or contractual restrictions. Payments to us by our subsidiaries will also be contingent upon our subsidiaries' earnings and business considerations.

The incurrence of additional indebtedness and other liabilities could materially and adversely affect our ability to pay our obligations on the notes. The terms of the notes do not limit our ability to incur senior indebtedness, and do not limit our ability or the ability of our subsidiaries to incur other indebtedness or other liabilities. As of June 30, 2001, we had senior indebtedness outstanding in the amount of approximately \$58.1 million (which consisted of \$57.0 million principal amount under our credit facility and \$1.1 million principal amount of letters of credit), and our subsidiaries had approximately \$62.4 million of other liabilities outstanding, excluding inter-company liabilities. Since June 30, 2001, we repaid all senior indebtedness under our credit facility and terminated the credit facility. See "Description of Notes--Subordination of the Notes." As of September 1, 2001, we had no senior indebtedness outstanding.

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

Our ability to make payments on our indebtedness, including the notes, and to fund planned capital expenditures and other activities will depend on our ability to generate cash in the future. This, to some extent,

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is subject to the volatile nature of our business, and general economic, competitive and other factors that are beyond our control. Accordingly, we cannot assure you that our business will generate sufficient cash flow to service our debt. In addition, our wholly owned subsidiary, American Fine Wire's gold supply agreement contains restrictions on its ability to declare and pay dividends to us.

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.

We may be unable to redeem the notes if we experience a fundamental change

If we experience a fundamental change, you are entitled to redeem all or a portion of your notes, but we may not have enough funds to pay the redemption price for all tendered notes. A fundamental change would also cause us to have to offer to redeem all of our 4 3/4% Convertible Subordinated Notes due 2006. Any future credit agreements or other agreements relating to our indebtedness may:

- contain provisions requiring payment of indebtedness after a fundamental change; or
- expressly prohibit our repurchase of the notes after a fundamental change.

If we experience a fundamental change at a time when we are prohibited from purchasing or redeeming notes, we could seek the consent of our lenders to redeem the notes or could attempt to refinance such debt. If we should fail to obtain our lenders' consent or refinance such debt, we could not purchase or redeem the notes. Our failure to redeem tendered notes would constitute an event of default under the indenture and our failure to redeem tendered 4 3/4% Convertible Subordinated Notes due 2006 would constitute an event of default under the indenture governing those notes, both of which, in turn, might constitute a default under the terms of other indebtedness. If this were to occur, or if a fundamental change were to constitute an event of default under any senior indebtedness, the indenture's subordination provisions would restrict us from paying you.

The term "fundamental change" is limited to specified transactions and may not include other events that might adversely affect our financial condition. If we were to experience a fundamental change, our obligation to offer to redeem the notes would not necessarily afford you protection. See "Description of Notes--Redemption at Option of the Holder."

A public market may not develop for the notes

The initial purchaser of the notes in the initial private placement has advised us that it intends to make a market in the notes. However, the initial purchaser is not obligated to make a market in the notes and may discontinue this market making activity at any time without notice. In addition, market making activity by the initial purchaser will be subject to the limits imposed by the Securities Act and the Exchange Act. As a result, we cannot assure you that any market for the notes will develop or, if one does develop, that it will be maintained. If an active market for the notes fails to develop or be

sustained, the trading price of the notes could be materially adversely affected.

Our stock price may continue to experience large short-term fluctuations that may significantly affect the trading price of the notes

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

- . quarter to quarter variations in our operating results;
- shortfalls in our revenue or earnings from levels expected by securities analysts;
- announcements of technological innovations or new products by us or other companies; and
- . slowdowns or downturns in the semiconductor industry.

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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:

Fiscal Y	Years Ended	l Nine	months
Septem	mber 30,	eı	nded
		June	e 30,
1996 1997 1	L998 1999 2	2000 2	001

Ratio of earnings to fixed charges.... 5X 18X 2X -- 16X --

These computations include us and our consolidated subsidiaries. These ratios are computed by dividing (a) income (loss) before taxes 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 \$16.2 million in fiscal 1999 and \$43.4 million in the nine months ended June 30, 2001 to achieve a ratio of 1:1.

DESCRIPTION OF NOTES

The notes were issued under an indenture dated as of August 15, 2001, between Kulicke and Soffa Industries, Inc., as issuer, and Chase Manhattan Trust Company, National Association, as trustee. The notes are covered by a registration rights agreement. You may request a copy of the indenture and the registration rights agreement from the trustee.

The following description is a summary of the material provisions of the notes and the indenture. It does not purport to be complete. This summary is subject to and is qualified by reference to all the provisions of the indenture, including the definitions of certain terms used in the indenture. Wherever particular provisions or defined terms of the indenture or form of note are referred to, these provisions or defined terms are incorporated in this prospectus by reference.

As used in this "Description of Notes" section, references to "Kulicke & Soffa," "we," "our" or "us" refer solely to Kulicke and Soffa Industries, Inc., and not to our subsidiaries.

General

The notes are general unsecured debt. Our payment obligations under the notes are subordinated to our senior indebtedness as described under "Subordination of the Notes." The notes rank equally with our 4 3/4% Convertible Subordinated Notes due 2006. The notes are convertible into common stock as described under "Conversion of the Notes."

The notes were issued only in denominations of \$1,000 and multiples of \$1,000. The notes will mature on August 15, 2006, unless converted earlier, redeemed at our option or redeemed at your option upon a fundamental change.

Neither we nor any of our subsidiaries are subject to any financial covenants under the indenture. In addition, neither we nor any of our subsidiaries are restricted under the indenture from paying dividends, incurring debt, including senior indebtedness, or issuing or repurchasing our securities.

You are not afforded protection under the indenture in the event of a highly leveraged transaction or a change in control of Kulicke & Soffa, except to the extent described below under "Redemption at Option of the Holder."

We will pay interest on February 15 and August 15 of each year, beginning February 15, 2002, to record holders at the close of business on the preceding February 1 and August 1, as the case may be, except:

- interest payable upon redemption will be paid to the person to whom principal is payable, unless the redemption date is an interest payment date; and
- . as set forth in the next sentence.

In case you convert any of your notes into common stock during the period after any record date but prior to the next interest payment date, one of the following will occur:

- we will not be required to pay interest on the interest payment date if the note has been called for redemption on a redemption date that occurs during this period;
- . we will not be required to pay interest on the interest payment date if the note is to be redeemed in connection with a fundamental change on a

redemption date that occurs during this period; or

. if otherwise, any note not called for redemption that is submitted for conversion during this period must also be accompanied by an amount equal to the interest due on the interest payment date on the converted principal amount, unless at the time of conversion there is a default in the payment of interest on the notes. See "Conversion of the Notes."

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We will maintain an office in the Borough of Manhattan, the City of New York for the payment of interest, which shall initially be an office or agency of the trustee. We may pay interest either:

- . by check mailed to your address as it appears in the note register, but if you are a holder with an aggregate principal amount in excess of \$2.0 million, we will pay you, at your written election, by wire transfer in immediately available funds; or
- . by transfer to an account maintained by you in the United States.

However, payments to The Depository Trust Company, New York, New York, which we refer to as DTC, will be made by wire transfer of immediately available funds to the account of DTC or its nominee. Interest will be computed on the basis of a 360-day year composed of twelve 30-day months.

Conversion of the Notes

You may convert your notes, in whole or in part, into common stock prior to the final maturity date of the notes, subject to prior redemption of the notes. The number of shares of common stock you will receive upon conversion of your notes will be determined by multiplying the number of \$1,000 principal amount notes you convert by the conversion ratio on the date of conversion. If we call notes for redemption, you may convert your notes only until the close of business on the business day prior to the redemption date unless we fail to pay the redemption price. If you have submitted your notes for redemption upon a fundamental change, you may convert your notes only if you withdraw your redemption election. You may convert your notes in part so long as this part is \$1,000 principal amount or an integral multiple of \$1,000. If any notes not called for redemption are converted after a record date for any interest payment date and prior to the next interest payment date, the notes must be accompanied by an amount equal to the interest payable on the interest payment date on the converted principal amount, unless a default in the payment of interest on the notes exists at the time of conversion.

The initial conversion ratio for the notes is 50.6401 shares of common stock per \$1,000 principal amount of notes, subject to adjustment as described below. We will not issue fractional shares of common stock upon conversion of the notes. Instead, we will pay cash equal to the market price of the common stock on the business day prior to the conversion date. Except as described below, you will not receive any accrued interest or dividends upon conversion.

To convert your note into common stock you must:

- complete and manually sign the conversion notice on the back of the note or facsimile of the conversion notice and deliver this notice to the conversion agent;
- . surrender the note to the conversion agent;
- . if required, furnish appropriate endorsements and transfer documents;

- . if required, pay all transfer or similar taxes; and
- . if required, pay funds equal to interest payable on the next interest payment date.

The date on which you comply with these requirements is the conversion date under the indenture.

We will adjust the conversion ratio if the following events occur:

- (1) we issue common stock as a dividend or distribution on our common stock;
- (2) we issue to all holders of common stock certain rights or warrants to purchase our common stock;
- (3) we subdivide or combine our common stock;
- (4) we distribute to all holders of our common stock capital stock, evidences of indebtedness or assets, including securities but excluding:
 - . rights or warrants listed in (2) above;

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- . dividends or distributions listed in (1) above; and
- . cash distributions listed in (5) below;
- (5) we distribute cash, excluding any dividend or distribution in connection with our liquidation, dissolution or winding up or any quarterly cash dividend on our common stock to the extent that the aggregate cash dividend per share of common stock in any quarter does not exceed the greater of:
 - . the amount per share of common stock of the next preceding quarterly cash dividend on the common stock to the extent that the preceding quarterly dividend did not require an adjustment of the conversion ratio pursuant to this clause (5), as adjusted to reflect subdivisions or combinations of the common stock; and
 - . 3.75% of the average of the last reported sale price of the common stock during the ten trading days immediately prior to the declaration date of the dividend.

If an adjustment is required to be made under this clause (5) as a result of a distribution that is a quarterly dividend, the adjustment would be based upon the amount by which the distribution exceeds the amount of the quarterly cash dividend permitted to be excluded pursuant to this clause (5). If an adjustment is required to be made under this clause (5) as a result of a distribution that is not a quarterly dividend, the adjustment would be based upon the full amount of the distribution; and

(6) we or one of our subsidiaries make a payment in respect of a tender offer or exchange offer for our common stock to the extent that the cash and value of any other consideration included in the payment per share of common stock exceeds the current market price per share of common stock on the trading day next succeeding the

last date on which tenders or exchanges may be made pursuant to such tender or exchange offer; and

- (7) someone other than us or one of our subsidiaries makes a payment in respect of a tender offer or exchange offer in which, as of the closing date of the offer, our board of directors is not recommending rejection of the offer. The adjustment referred to in this clause (7) will be made only if:
 - . the tender offer or exchange offer is for an amount that increases the offeror's ownership of common stock to more than 25% of the total shares of common stock outstanding; and
 - . the cash and value of any other consideration included in the payment per share of common stock exceeds the current market price per share of common stock on the business day next succeeding the last date on which tenders or exchanges may be made pursuant to the tender or exchange offer.

However, the adjustment referred to in this clause (7) will generally not be made if, as of the closing of the offer, the offering documents disclose a plan or an intention to cause us to engage in a consolidation or merger or a sale of all or substantially all of our assets.

To the extent that we have a rights plan in effect upon conversion of the notes into common stock, you will receive, in addition to the common stock, the rights under the rights plan whether or not the rights have separated from the common stock at the time of conversion, subject to limited exceptions.

In the event of:

- . any reclassification of our common stock;
- . a consolidation, merger or combination involving Kulicke & Soffa; or
- . a sale or conveyance to another person or entity of all or substantially all of our property or assets;

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in which holders of common stock would be entitled to receive stock, other securities, other property, assets or cash for their common stock, upon conversion of your notes you will be entitled to receive the same type of consideration which you would have been entitled to receive if you had converted the notes into our common stock immediately prior to any of these events.

You may in certain situations be deemed to have received a distribution subject to United States federal income tax as a dividend in the event of any taxable distribution to holders of common stock or in certain other situations requiring a conversion ratio adjustment. See "United States Federal Tax Considerations."

We may, from time to time, increase the conversion ratio for a period of at least 20 days if our board of directors has made a determination that this increase would be in our best interests. Any such determination by our board will be conclusive. We would give holders at least 15 days' notice of any increase in the conversion ratio. In addition, we may increase the conversion ratio if our board of directors deems it advisable to avoid or diminish any income tax to holders of common stock resulting from any stock distribution.

See "United States Federal Tax Considerations."

We will not be required to make an adjustment in the conversion ratio unless the adjustment would require a change of at least one percent in the conversion ratio. However, we will carry forward any adjustments that are less than one percent of the conversion ratio. Except as described above in this section, we will not adjust the conversion ratio for any issuance of our common stock or convertible or exchangeable securities or rights to purchase our common stock or convertible or exchangeable securities.

Optional Redemption by Kulicke and Soffa Industries, Inc.

Provisional Redemption

We may redeem the notes in whole or in part at any time prior to August 19, 2004 at a redemption price equal to \$1,000 per \$1,000 aggregate principal amount of notes if:

- . the closing price of the common stock has exceeded 150% of the conversion price for at least 20 trading days in any consecutive 30-day trading period; and
- . the shelf registration statement covering resales of the notes and the common stock is effective and expected to remain effective for the 30 days following the redemption date.

The "conversion price" as of any day will equal \$1,000 divided by the number of shares of common stock issuable upon a conversion of a note.

If we redeem the notes under these circumstances, we will make an additional payment equal to the total value of the aggregate amount of the interest otherwise payable on the notes from the last day through which interest was paid on the notes, or August 15, 2001 if no interest has been paid, through August 19, 2004. We must make these payments on all notes called for redemption, including notes converted after the date we mailed the notice.

Non-Provisional Redemption

The notes are not entitled to any sinking fund. At any time on or after August 19, 2004, we may redeem the notes in whole or in part at the following prices expressed as a percentage of the principal amount:

Redemption	Period				Price
Beginning on August	19, 2004	and ending on	August 14,	2005	102.100%
Beginning on August	15, 2005	and ending on	August 14,	2006	101.050%

and 100 percent if redeemed at August 15, 2006. In each case, we will pay interest to, but excluding, the redemption date. If the redemption date is an interest payment date, we will pay interest to the record holder on

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the relevant record date. We are required to give notice of redemption by mail to holders not more than 60 but not less than 30 days prior to the redemption date.

If less than all of the outstanding notes are to be redeemed, the trustee will select the notes to be redeemed in principal amounts of \$1,000 or integral multiples of \$1,000 by lot, pro rata or by another method the trustee considers fair and appropriate. If a portion of your notes is selected for partial redemption and you convert a portion of your notes, the converted portion shall be deemed to be of the portion selected for redemption.

We may not redeem the notes if we have failed to pay any interest or premium on the notes and such failure to pay is continuing. We will issue a press release if we redeem the notes.

Redemption at Option of the Holder

If a "fundamental change" of Kulicke & Soffa occurs at any time prior to the maturity of the notes, you may require us to redeem your notes, in whole or in part, on a repurchase date that is 30 days after the date of our notice of the fundamental change. The notes will be redeemable in integral multiples of \$1,000 principal amount.

We will redeem the notes at a price equal to 100% of the principal amount to be redeemed, plus accrued interest to, but excluding, the repurchase date. If the repurchase date is an interest payment date, we will pay interest to the record holder on the relevant record date.

We will mail to all record holders a notice of a fundamental change of Kulicke & Soffa within 10 days after it has occurred. We are also required to deliver to the trustee a copy of the fundamental change notice. If you elect to redeem your notes, you must deliver to us or our designated agent, on or before the 30th day after the date of our fundamental change notice, your redemption notice and any notes to be redeemed, duly endorsed for transfer. We will promptly pay the redemption price for notes surrendered for redemption following the repurchase date.

A "fundamental change" of Kulicke and Soffa Industries, Inc. is any transaction or event (whether by means of an exchange offer, liquidation, tender offer, consolidation, merger, combination, reclassification, recapitalization or otherwise) in connection with which all or substantially all of our common stock is exchanged for, converted into, acquired for or constitutes solely the right to receive consideration which is not all or substantially all common stock that:

- . is listed, or immediately after the transaction or event will be listed, on a United States national securities exchange; or
- . is approved, or immediately after the transaction or event will be approved, for quotation on the Nasdaq National Market or any similar United States system of automated dissemination of quotations of securities prices.

We will comply with any applicable provisions of Rule 13e-4 and any other tender offer rules under the Exchange Act in the event of a fundamental change.

These fundamental change redemption rights could discourage a potential acquiror of Kulicke & Soffa. However, this fundamental change redemption feature is not the result of management's knowledge of any specific effort to obtain control of Kulicke & Soffa by means of a merger, tender offer or solicitation, or part of a plan by management to adopt a series of antitakeover provisions. The term "fundamental change" is limited to specified transactions and may not include other events that might adversely affect our financial condition or business operations. In addition, our obligation to offer to redeem the notes upon a fundamental change would not necessarily

afford you protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving Kulicke & Soffa.

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We may be unable to redeem the notes in the event of a fundamental change. If a fundamental change were to occur, we may not have enough funds to pay the redemption price for all tendered notes. In addition, any future agreements relating to our indebtedness may contain provisions prohibiting the redemption of the notes under certain circumstances, or expressly prohibit our repurchase of the notes upon a fundamental change or may provide that a fundamental change constitutes an event of default under that agreement. If a fundamental change occurs at a time when we are prohibited from purchasing or redeeming the notes, we could seek the consent of our lenders to redeem the notes or could attempt to refinance this debt. If we do not obtain a consent or refinance the debt, we could not purchase or redeem the notes. Our failure to redeem tendered notes would constitute an event of default under the indenture, which might constitute a default under the terms of our other indebtedness. In such circumstances, or if a fundamental change would constitute an event of default under our senior indebtedness, if any, the subordination provisions of the indenture would restrict payments to the holders of notes.

Subordination of the Notes

Payment on the notes will, to the extent provided in the indenture, be subordinated in right of payment to the prior payment in full of all of our senior indebtedness. The notes also are effectively subordinated to all debt and other liabilities, including trade payables and lease obligations, if any, of our subsidiaries.

As of June 30, 2001, we had senior indebtedness outstanding in the amount of approximately \$58.1 million, and our subsidiaries had approximately \$62.4 million of other liabilities outstanding, excluding inter-company liabilities. We used a portion of the net proceeds from the sale of the notes to repay all remaining indebtedness outstanding under our credit facility and terminated the credit facility. As of September 1, 2001, we had no senior indebtedness outstanding. The notes rank equally with our 4 3/4% Convertible Subordinated Notes due 2006. Neither we nor our subsidiaries are prohibited from incurring debt, including senior indebtedness, under the indenture. We may, from time to time, incur additional debt, including senior indebtedness. Our subsidiaries may also, from time to time, incur other additional debt and liabilities.

Upon any distribution of our assets upon any dissolution, winding up, liquidation or reorganization, the payment of the principal of, or premium, if any, interest, and liquidated damages, if any, on the notes will be subordinated in right of payment to the prior payment in full in cash or other payment satisfactory to the holders of senior indebtedness of all senior indebtedness. In the event of any acceleration of the notes because of an event of default, the holders of any outstanding senior indebtedness would be entitled to payment in full in cash or other payment satisfactory to the holders of senior indebtedness of all senior indebtedness obligations before the holders of the notes are entitled to receive any payment or distribution. We are required under the indenture to notify holders of senior indebtedness promptly if payment of the notes is accelerated because of an event of default.

We may not make any payment on the notes if:

. a default in the payment of designated senior indebtedness occurs and is continuing beyond any applicable period of grace (called a "payment

default"); or

. a default other than a payment default on any designated senior indebtedness occurs and is continuing that permits holders of designated senior indebtedness to accelerate its maturity, or in the case of a lease, a default occurs and is continuing that permits the lessor either to terminate the lease or require us to make an irrevocable offer to terminate the lease following an event of default under the lease, and the trustee receives a notice of such default (called a "payment blockage notice") from us or any other person permitted to give such notice under the indenture (called a "non-payment default").

We may resume payments and distributions on the notes:

. in case of a payment default, upon the date on which such default is cured or waived or ceases to exist; and

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. in case of a non-payment default, the earlier of the date on which such nonpayment default is cured or waived or ceases to exist, or 179 days after the date on which the payment blockage notice is received, if the maturity of the designated senior indebtedness has not been accelerated, or in the case of any lease, 179 days after notice is received if we have not received notice that the lessor under such lease has exercised its right to terminate the lease or require us to make an irrevocable offer to terminate the lease following an event of default under the lease.

No new period of payment blockage may be commenced pursuant to a payment blockage notice unless 365 days have elapsed since the initial effectiveness of the immediately prior payment blockage notice. No non-payment default that existed or was continuing on the date of delivery of any payment blockage notice shall be the basis for any later payment blockage notice.

If the trustee or any holder of the notes receives any payment or distribution of our assets in contravention of the subordination provisions on the notes before all senior indebtedness is paid in full in cash or other payment satisfactory to holders of senior indebtedness, then such payment or distribution will be held in trust for the benefit of holders of senior indebtedness or their representatives to the extent necessary to make payment in full in cash or payment satisfactory to the holders of senior indebtedness of all unpaid senior indebtedness.

In the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of the notes may receive less, ratably, than our other creditors. This subordination will not prevent the occurrence of any event of default under the indenture.

The notes are exclusively obligations of Kulicke & Soffa. A substantial portion of our operations are conducted through our subsidiaries. As a result, our cash flow and our ability to service our debt, including the notes, is dependent upon the earnings of our subsidiaries. In addition, we are dependent on the distribution of earnings, loans or other payments by our subsidiaries to us.

Our subsidiaries are separate and distinct legal entities. Our subsidiaries have no obligation to pay any amounts due on the notes. Our subsidiaries are not required to provide us with funds for our payment obligations, whether by dividends, distributions, loans or other payments. In addition, any payment of dividends, distributions, loans or advances by our subsidiaries to us could be

subject to statutory or contractual restrictions. Payments to us by our subsidiaries will also be contingent upon our subsidiaries' earnings and business considerations.

Our right to receive any assets of any of our subsidiaries upon their liquidation or reorganization, and therefore the right of the holders to participate in those assets, will be effectively subordinated to the claims of that subsidiary's creditors, including trade creditors. In addition, even if we were a creditor to any of our subsidiaries, our rights as a creditor would be subordinate to any security interest in the assets of our subsidiaries and any indebtedness of our subsidiaries senior to that held by us.

We are obligated to pay reasonable compensation to the trustee and to indemnify the trustee against certain losses, liabilities or expenses incurred by the trustee in connection with its duties relating to the notes. The trustee's claims for these payments will generally be senior to those of noteholders in respect of all funds collected or held by the trustee.

Certain Definitions

"designated senior indebtedness" means any senior indebtedness that expressly provides that such senior indebtedness shall be "designated senior indebtedness" for purposes of the indenture. Any agreement for designated senior indebtedness may place limitations and conditions on the right of the creditor to exercise the rights of designated senior indebtedness.

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"indebtedness" means:

- (1) all indebtedness, obligations and other liabilities for borrowed money, including overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, or evidenced by bonds, debentures, notes, or similar instruments, other than any account payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services;
- (2) obligations with respect to letters of credit, bank guarantees or bankers' acceptances;
- (3) obligations in respect of leases required in conformity with generally accepted accounting principles to be accounted for as capitalized lease obligations on our balance sheet;
- (4) all obligations and other liabilities under any lease or related document in connection with the lease of real property that provides that we are contractually obligated to purchase or cause a third party to purchase the leased property, and thereby guarantee a minimum residual value of the leased property to the lessor and our obligations under the lease or related document to purchase or to cause a third party to purchase the leased property;
- (5) all obligations with respect to an interest rate or other swap, cap or collar agreement or foreign currency hedge, exchange or purchase agreement;
- (6) all direct or indirect guaranties or similar agreements in respect of, and any obligations or liabilities to purchase, acquire or

otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of others of the type described in (1) through (5) above;

- (7) any obligations described in (1) through (6) above secured by any mortgage, pledge, lien or other encumbrance existing on property which is owned or held by us; and
- (8) any amendments or modifications to (1) through (7) above.

"senior indebtedness" means the principal, premium, if any, interest, including any interest accruing after bankruptcy, and rent or termination payment on or other amounts due on our current or future indebtedness, whether created, incurred, assumed, guaranteed or in effect guaranteed by us, including any deferrals, renewals, extensions, refundings, amendments, modifications or supplements to the above. However, senior indebtedness does not include:

- indebtedness that expressly provides that it shall not be senior in right of payment to the notes or expressly provides that it is on parity with or junior to the notes;
- . our indebtedness to any of our majority-owned subsidiaries; and
- . the notes.

Events of Default; Notice and Waiver

The following will be events of default under the indenture:

- . we fail to pay principal or premium, if any, when due upon maturity or redemption or otherwise on the notes, whether or not the payment is prohibited by the subordination provisions of the indenture;
- . we fail to pay any interest and liquidated damages, if any, on the notes, when due whether or not the payment is prohibited by the subordination provisions of the indenture and such failure continues for a period of 30 days;
- . we fail to perform or observe any of the covenants in the indenture for $60\ \mathrm{days}$ after notice; or
- . certain events involving our bankruptcy, insolvency or reorganization.

The trustee may withhold notice to the holders of the notes of any default, except defaults in payment of principal, premium, interest or liquidated damages, if any, on the notes. However, the trustee must consider it to be in the interest of the holders of the notes to withhold this notice.

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If an event of default occurs and continues, the trustee or the holders of at least 25% in principal amount of the outstanding notes may declare the principal, premium, if any, and accrued interest and liquidated damages, if any, on the outstanding notes to be immediately due and payable. In case of certain events of bankruptcy or insolvency involving us, the principal, premium, if any, and accrued interest and liquidated damages, if any, on the notes will automatically become due and payable. However, if we cure all defaults, except the nonpayment of principal, premium, if any, interest or liquidated damages, if any, that became due as a result of the acceleration, and meet certain other conditions, with certain exceptions, this declaration

may be cancelled and the holder of a majority of the principal amount of outstanding notes may waive these past defaults.

Payments of principal, premium, if any, or interest on the notes that are not made when due will accrue interest at the annual rate of $5\ 1/4\%$ from the required payment date.

The holders of a majority of outstanding notes will have the right to direct the time, method and place of any proceedings for any remedy available to the trustee, subject to limitations specified in the indenture.

No holder of notes may pursue any remedy under the indenture, except in the case of a default in the payment of principal, premium or interest on the notes, unless:

- . the holder has given the trustee written notice of an event of default;
- the holders of at least 25% in principal amount of outstanding notes make a written request, and offer reasonable indemnity, to the trustee to pursue the remedy;
- . the trustee does not receive an inconsistent direction from the holders of a majority in principal amount of the notes; and
- the trustee fails to comply with the request within 60 days after receipt.

Modification and Waiver

The consent of the holders of a majority in principal amount of the outstanding notes is required to modify or amend the indenture. However, a modification or amendment requires the consent of the holder of each affected note if it would:

- . extend the fixed maturity of any note;
- . reduce the rate or extend the time for payment of interest of any note;
- . reduce the principal amount or premium of any note;
- . reduce any amount payable upon redemption or repurchase of any note;
- adversely change our obligation to redeem any note upon a fundamental change;
- . impair the right of a holder to institute suit for payment on any note;
- . change the currency in which any note is payable;
- . impair the right of a holder to convert any note;
- . adversely modify the subordination provisions of the indenture;
- . reduce the quorum or voting requirements under the indenture; and
- . subject to specified exceptions, modify certain of the provisions of the indenture relating to modification or waiver of provisions of the indenture; or reduce the percentage of notes required for consent to any modification of the indenture.

We are permitted to modify certain provisions of the indenture without the consent of the holders of the notes.

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Information Concerning the Trustee

We have appointed Chase Manhattan Trust Company, National Association, the trustee under the indenture, as paying agent, conversion agent, note registrar and custodian for the notes. The trustee or its affiliates may provide banking and other services to us in the ordinary course of their business.

The indenture contains certain limitations on the rights of the trustee, as long as it or any of its affiliates is then our creditor, to obtain payment of claims in certain cases or to realize on certain property received on any claim as security or otherwise. The trustee and its affiliates will be permitted to engage in other transactions with us. However, if the trustee or any affiliate continues to have any conflicting interest and a default occurs with respect to the notes, the trustee must eliminate such conflict or resign.

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DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 200,000,000 shares of common stock, without par value, and 5,000,000 shares of preferred stock, without par value. As of September 14, 2001, there were 49,034,316 shares of common stock and no shares of preferred stock outstanding. The following description of our capital stock is qualified in its entirety by reference to our articles of incorporation and bylaws, each as amended, and the description of our common stock contained in our registration statement on Form 8-A12G/A filed with the SEC and hereby incorporated by reference in this prospectus.

Common Stock

The holders of the common stock are entitled to one vote per share for each share held of record on all matters submitted to a vote of shareholders. Subject to preferential rights with respect to any series of preferred stock that may be issued, holders of the common stock are entitled to receive ratably such dividends as may be declared by the board of directors on the common stock out of funds legally available therefor and, in the event of a liquidation, dissolution or winding-up of our affairs, are entitled to share equally and ratably in all of our remaining assets and funds. In the election of directors, the holders of the common stock may multiply the number of votes the shareholder is entitled to cast by the total number of directors to be elected at a meeting of shareholders and cast the whole number of votes for one candidate or distribute them among some or all candidates. The holders of the common stock have no preemptive rights or rights to convert shares of the common stock into any other securities and are not subject to future calls or assessments by us. All outstanding shares of the common stock are fully paid and nonassessable.

Preferred Stock

By resolution of the board of directors and without any further vote or action by the shareholders, we have the authority to issue preferred stock in one or more series and to fix from time to time the number of shares to be included in each such series and the designations, preferences, qualifications, limitations, restrictions and special or relative rights of the shares of each such series. Our ability to issue preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could adversely affect the voting power of the holders of

the common stock and could have the effect of making it more difficult for a person to acquire, or of discouraging a person from attempting to acquire, control of us. We have no present plans to issue any of the preferred stock.

Certain Charter Provisions

Some parts of our articles of incorporation and bylaws and Pennsylvania law may discourage certain transactions involving a change in control of Kulicke & Soffa. For example, our articles of incorporation and bylaws contain provisions that (i) classify the board of directors into four classes, with one class being elected each year, (ii) permit the board to issue "blank check" preferred stock without shareholder approval and (iii) prohibit us from engaging in certain business combinations with a holder of 20% or more of our voting securities without super-majority board or shareholder approval. Further, under the Pennsylvania Business Corporation Law, because our bylaws provide for a classified board of directors, shareholders may only remove directors for cause. These provisions and provisions of the Pennsylvania Business Corporation Law could have the effect of delaying, deferring or preventing a change in control of Kulicke & Soffa and may adversely affect the voting and other rights of holders of common stock.

Transfer Agent and Registrar

American Stock Transfer and Trust Company is the transfer agent and registrar for our common stock, with offices in New York, New York.

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UNITED STATES FEDERAL TAX CONSIDERATIONS

The following is a summary of certain U.S. federal income tax considerations relating to the purchase, ownership and disposition of the notes and common stock into which notes may be converted, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based on laws, regulations, rulings and decisions now in effect, all of which are subject to change or differing interpretation, possibly with retroactive effect. Except as specifically discussed below with regard to Non-U.S. Holders (as defined below), this summary applies only to beneficial owners that will hold notes and common stock into which notes may be converted as "capital assets" (within the meaning of section 1221 of the Internal Revenue Code of 1986, as amended (the "Code")) and who, for U.S. federal income tax purposes, are (i) individual citizens or residents of the U.S., (ii) corporations or other entities created or organized in or under the laws of the U.S. or of any political subdivision thereof, (iii) estates, the income of which are subject to U.S. federal income taxation regardless of the source of such income or (iv) trusts subject to the primary supervision of a U.S. court and the control of one or more U.S. persons and certain trusts in existence on August 20, 1996 that elect to be treated as United States persons, as such term is defined in the Code ("U.S. Holders"). Persons other than U.S. Holders ("Non-U.S. Holders") are subject to special U.S. federal income tax considerations, some of which are discussed below. This discussion does not address all of the tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, such as banks or other financial institutions, holders subject to the alternative minimum tax, tax-exempt organizations, insurance companies, foreign persons or entities (except to the extent specifically set forth below), dealers in securities or currencies, partnerships or other entities classified as partnerships for U.S. federal income tax purposes, U.S. Holders whose financial currency is not the U.S. dollar, persons that will hold notes as a position in a hedging transaction, "straddle" or "conversion transaction" for tax purposes or persons deemed to sell notes or common stock under the

constructive sale provisions of the Code. If a partnership is a beneficial owner of a note or the stock into which the notes may be converted, the treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. A beneficial owner of notes or the common stock into which notes may be converted that is a partnership and partners in such partnership should consult their tax advisors about the U.S. federal income tax consequences of the acquisition, ownership and disposition of the notes and the common stock into which the notes may be converted. We have not sought any ruling from the Internal Revenue Service (the "IRS") or an opinion of counsel with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. In addition, the IRS is not precluded from successfully adopting a contrary position. This summary does not discuss the effect of the federal estate or gift tax laws (except as set forth below with respect to Non-U.S. Holders) or the tax laws of any applicable foreign, state, local or other jurisdiction.

THE FOLLOWING DISCUSSION OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. ACCORDINGLY, INVESTORS CONSIDERING THE PURCHASE OF NOTES SHOULD CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE UNITED STATES FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER THE FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR FOREIGN TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

U.S. Holders

Taxation of Interest

Interest paid on the notes will be included in the income of a U.S. Holder as ordinary income at the time it is treated as received or accrued, in accordance with such holder's regular method of accounting for U.S. federal income tax purposes. Under Treasury Regulations, the possibility of an additional payment under a note may be disregarded for purposes of determining the amount of interest or original issue discount income to be recognized by a holder in respect of such note (or the timing of such recognition) if the likelihood of the payment, as of the

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date the notes are issued, is remote. Our failure to cause to be declared effective or to maintain the effectiveness of a shelf registration statement may result in the payment of predetermined liquidated damages in the manner described therein. A holder may require us to redeem any and all of his notes in the event of a fundamental change. We intend to take the position that a "fundamental change" is remote under the Treasury Regulations, and likewise do not intend to treat the possibility of a "fundamental change" as affecting the yield to maturity of any note. In the event this contingency occurs, it would affect the amount and timing of the income that must be recognized by a U.S. Holder of notes. There can be no assurance that the IRS will agree with such positions.

Sale or Redemption of the Notes

Upon the sale or redemption of a note, a U.S. Holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash proceeds and the fair market value of any property received on the sale or redemption (except to the extent such amount is attributable to accrued interest income not previously included in income, which will be taxable as ordinary income, or is attributable to accrued interest that was previously included in income, which amount may be received without generating

further income) and (ii) such holder's adjusted tax basis in the note. A U.S. Holder's adjusted tax basis in a note generally will equal the cost of the note to such holder increased by the amount of any market discount taken into income as ordinary income (as discussed below) or decreased by any bond premium previously amortized with respect to the note (as discussed below). Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in the note is more than one year at the time of sale, exchange or redemption. Long-term capital gains recognized by certain noncorporate U.S. Holders, including individuals, will generally be subject to a maximum rate of tax of 20%. The deductibility of capital losses is subject to limitations.

Market Discount

The market discount rules discussed below apply to any note purchased after its original issuance at a price that is less than its principal amount, as well as to any note purchased at its original issuance for an amount that is less than the price at which a substantial amount of the notes were originally sold.

A U.S. Holder who purchases a note at a market discount generally will be required to treat any principal payments on, or any gain on the disposition or maturity of, such note as ordinary income to the extent of the accrued market discount (not previously included in income) at the time of such payment or disposition. In general, subject to a de minimis exception, market discount is the amount by which the note's principal amount exceeds the holder's tax basis in the note immediately after the note is acquired. A note is not treated as purchased at market discount, however, if the market discount is less than .25 percent of the principal amount of the note multiplied by the number of complete years to maturity from the acquisition date. Market discount on a note will accrue on a straight-line basis, unless the holder elects to accrue such discount on a constant yield to maturity basis. This election is irrevocable and applies only to the note for which it is made. A holder may also elect to include market discount in income currently as it accrues. This election, once made, applies to all market discount obligations acquired on or after the first day of the first taxable year to which the election applies and may not be revoked without the consent of the IRS. If a U.S. Holder disposes of a note acquired at a market discount in any nontaxable transaction (other than certain nonrecognition transactions described in regulations to be promulgated under Section 1276(d) of the Code), accrued market discount will be includible in the U.S. Holder's income as ordinary income as if the U.S. Holder had sold the note at its fair market value. The U.S. Holder may be required to defer until the maturity of the note or, in certain circumstances, its earlier disposition, the deduction or all or a portion of the interest expense attributable to debt incurred or continued to purchase or carry a note with market discount, unless the U.S. Holder makes an election to include the market discount on a current basis.

Amortizable Bond Premium

A U.S. Holder who purchases a note for an amount in excess of its principal amount generally will be considered to have purchased the note with "amortizable bond premium". Such a U.S. Holder generally may elect to amortize such premium using the constant yield to maturity method. The amount amortized in any year will generally be treated as a reduction of interest income on the note. If the amortizable bond premium allocable

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to a year exceeds the amount of interest allocable to that year, the excess would be allowed as a deduction for

that year but only to the extent of the U.S. Holder's prior interest inclusions on the note. If the U.S. Holder does not make such an election, the premium on the note will decrease the gain or increase the loss otherwise recognized on the sale, redemption, retirement or other disposition of the note. The election to amortize the premium on a constant yield to maturity method, once made, generally applies to all bonds held or subsequently acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies and may not be revoked without the consent of the IRS.

Conversion of the Notes

A U.S. Holder generally will not recognize any income, gain or loss upon conversion of a note into common stock except with respect to cash received in lieu of a fractional share of common stock. A U.S. Holder's tax basis in the common stock received on conversion of a note will be the same as such holder's adjusted tax basis in the note at the time of conversion (reduced by any basis allocable to a fractional share interest), and the holding period for the common stock received on conversion will generally include the holding period of the note converted.

Cash received in lieu of a fractional share of common stock upon conversion will be treated as a payment in exchange for the fractional share of common stock. Accordingly, the receipt of cash in lieu of a fractional share of common stock generally will result in capital gain or loss (measured by the difference between the cash received for the fractional share and the holder's adjusted tax basis in the fractional share).

Dividends

Distributions, if any, made on the common stock after a conversion generally will be included in the income of a U.S. Holder as dividend income to the extent of our current or accumulated earnings and profits. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of the U.S. Holder's basis in the common stock and thereafter as capital gain.

Holders of convertible debt instruments such as the notes may, in certain circumstances, be deemed to have received distributions of stock if the conversion price of such instruments is adjusted. Adjustments to the conversion price made pursuant to a bona fide reasonable adjustment formula which has the effect of preventing the dilution of the interest of the holders of the debt instruments, however, will generally not be considered to result in a constructive distribution of stock. Certain of the possible adjustments provided in the notes (including, without limitation, adjustments in respect of taxable dividends to our stockholders) will not qualify as being pursuant to a bona fide reasonable adjustment formula. If such adjustments are made, the U.S. Holders of notes will be deemed to have received constructive distributions taxable as dividends to the extent of our current and accumulated earnings and profits even though they have not received any cash or property as a result of such adjustments. In certain circumstances, the failure to provide for such an adjustment may result in taxable dividend income to the U.S. Holders of common stock.

Sale of Common Stock

Upon the sale of common stock a U.S. Holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property received upon the sale or exchange and (ii) such U.S. Holder's adjusted tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in common stock is more than one year at the time of

the sale or exchange.

Special Tax Rules Applicable to Non-U.S. Holders

In general, subject to the discussion below concerning backup withholding:

(a) payments of principal or interest on the notes by us or any paying agent to a beneficial owner of a note that is a Non-U.S. Holder will not be subject to U.S. withholding tax, provided that, in the case of

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interest, (i) such Non-U.S. Holder does not own, actually or constructively, 10% or more of the total combined voting power of all of our classes of stock entitled to vote within the meaning of section 871(h)(3) of the Code, (ii) such Non-U.S. Holder is not a "controlled foreign corporation" with respect to which we are a "related person" within the meaning of the Code, (iii) such Non-U.S. Holder is not a bank receiving interest described in section 881(c)(3)(A) of the Code, and (iv) the certification requirements under section 871(h) or section 881(c) of the Code and Treasury Regulations thereunder (discussed below) are satisfied;

- (b) a Non-U.S. Holder of a note or common stock will not be subject to U.S. federal income tax on gains realized on a sale, exchange or other disposition of such note or common stock unless (i) such Non-U.S. Holder is an individual who is present in the U.S. for 183 days or more in the taxable year of sale, exchange or other disposition, and certain conditions are met, (ii) such gain is effectively connected with the conduct by the Non-U.S. Holder of a trade or business in the U.S. and, if certain U.S. income tax treaties apply, is attributable to a U.S. permanent establishment maintained by the Non-U.S. Holder, (iii) the Non-U.S. Holder is subject to Code provisions applicable to certain U.S. expatriates, or (iv) in the case of common stock held by a person who holds more than 5% of such stock, we are or have been, at any time within the shorter of the five-year period preceding such sale or other disposition or the period such Non-U.S. Holder held the common stock, a U.S. real property holding corporation (a "USRPHC") for U.S. federal income tax purposes. We do not believe that we currently are a USRPHC or that we will become one in the future; and
- (c) interest on notes not excluded from U.S. withholding tax as described in (a) above and dividends on common stock upon conversion generally will be a subject to U.S. withholding tax at a 30% rate, except where a Non-U.S. Holder provides a properly executed IRS Form W-8 BEN claiming a reduction of or an exemption from withholding under an applicable tax treaty.

To satisfy the certification requirements referred to in (a) (iv) above, sections 871(h) and 881(c) of the Code and currently effective Treasury Regulations thereunder require that either (i) the beneficial owner of a note must certify, under penalties of perjury, to us or our paying agent, as the case may be, that such owner is a Non-U.S. Holder and must-provide such owner's name and address, and U.S. taxpayer identification number ("TIN"), if any, or (ii) a securities clearing organization, bank or other financial institution that holds customer securities in the ordinary course of its trade or business (a "Financial Institution") and holds the note on behalf of the beneficial owner thereof must certify, under penalties of perjury, to us or our paying agent, as the case may be, that such certificate has been received from the beneficial owner and must furnish the payor with a copy thereof. Such requirement will be fulfilled if the beneficial owner of a note certifies on IRS Forms W-8 BEN or W-8EXP or successor form, under penalties of perjury,

that it is a Non-U.S. Holder and provides its name and address or any Financial Institution holding the note on behalf of the beneficial owner files a statement with the withholding agent to the effect that it has received such a statement from the beneficial owner (and furnishes the withholding agent with a copy thereof). Special rules apply which permit the shifting of primary responsibility for withholding to certain financial intermediaries acting on behalf of beneficial owners.

If a Non-U.S. Holder of a note or common stock is engaged in a trade or business in the U.S. and if interest on the note, dividends on the common stock, or gain realized on the sale, exchange or other disposition of the note or common stock is effectively connected with the conduct of such trade or business (and, if certain tax treaties apply, is attributable to a U.S. permanent establishment maintained by the Non-U.S. Holder in the U.S.), the Non-U.S. Holder, although exempt from U.S. withholding tax (provided that the certification requirements discussed in the next sentence are met), will generally be subject to U.S. federal income tax on such interest, dividends or gain on a net income basis in the same manner as if it were a U.S. Holder. In lieu of the certificate described above, such a Non-U.S. Holder will be required to provide us with a properly executed IRS Form W-8ECI or successor form in order to claim an exemption from withholding tax. In addition, if such Non-U.S. Holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable treaty) of its effectively connected earnings and profits for the taxable year, subject to certain adjustments.

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U.S. Federal Estate Tax

A note held by an individual who at the time of death is not a citizen or resident of the U.S. (as specially defined for U.S. federal estate tax purposes) will not be subject to U.S. federal estate tax if the individual did not actually or constructively own 10% or more of the total combined voting power of all of our classes of stock and, at the time of the individual's death, payments with respect to such note would not have been effectively connected with the conduct by such individual of a trade or business in the U.S. Common stock held by an individual who at the time of death is not a citizen or resident of the U.S. (as specially defined for U.S. federal estate tax purposes) will be included in such individual's estate for U.S. federal estate tax purposes, unless an applicable estate tax treaty otherwise applies.

Non-U.S. Holders should consult with their tax advisors regarding U.S. and foreign tax consequences with respect to the notes and common stock.

Backup Withholding and Information Reporting

Information returns will be filed with the United States Internal Revenue Service in connection with payments made with respect to notes, as well as proceeds from the sale or other disposition of notes or common stock. You may be subject to backup withholding tax on these payments unless you comply with certification procedures to establish that you are not a U.S. person. Pursuant to the Economic Growth and Tax Reconciliation Act of 2001, the backup withholding rate is scheduled to reduce periodically through 2006. The certification procedures required to claim the exemption from withholding tax on interest described above will satisfy the certification requirement necessary to avoid backup withholding tax as well. Dividends on the common stock paid to Non-U.S. Holders that are subject to U.S. withholding tax, as described above, generally will be exempt from U.S. backup withholding tax but will be subject to certain information reporting.

The amount of any backup withholding from a payment to you will be allowed as a credit against your United States federal income tax liability and may entitle you to a refund provided that the required information is furnished to the IRS.

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SELLING SECURITYHOLDERS

We originally issued the notes in a private placement in August 2001. Selling securityholders may offer and sell the notes and the underlying common stock using this prospectus.

The following table contains information we received from the selling securityholders on or before October 1, 2001, with respect to the selling securityholders and the principal amount of notes and the underlying common stock beneficially owned by each selling securityholder prior to the offering and that may be offered using this prospectus.

Name 	Principal Amount at Maturity of Notes Beneficially Owned That May Be Sold	Percentage of Notes	to the	Shares of Common Stock That May	_
Alpha U.S. Sub Fund					
VIII, LLC	\$ 50,000	*	2,532	2,532	*
Government Argent Classic Convertible Arbitrage	25,000	*	1,266	1,266	*
Fund (Bermuda) Ltd Bank of Austria Cayman	4,000,000	3.2%	202,560	202,560	*
Islands LTD	3,365,000	2.7%	170,404	170,404	*
BNP Paribas Equity Strategies SNC LP	6,584,000	5.3%	364,618	333,414	*
BoilermakerBlacksmith Pension Trust CALAMOS(R) Market	1,400,000	1.1%	70,896	70 , 896	*
Neutral Fund CALAMOS(R) Investment Trust Canyon Capital Arbitrage	4,650,000	3.7%	235,476	235,476	*
Master Hedge Fund, Ltd Canyon MAC 18 LTD	2,500,000	2.0%	126,600	126,600	*
(RMF)	1,000,000	*	50,640	50,640	*
Fund (Cayman), Ltd	5,500,000	4.4%	278,521	278,521	*
Canyon Value Realization Fund, L.P	3,800,000		192,432		*
CFFX, LLC	2,000,000	1.6%	101,280	101,280	*
Master Retirement Trust	1,100,000	*	168,925	55,704	*

Clarica Life Insurance					
Co U.S	350,000	*	17 , 724	17 , 724	*
Clinton Multistrategy	F 000 000	4 00	252 201	252 201	+
Master Fund, Ltd	5,000,000	4.0%	253 , 201	253 , 201	^
Clinton Riverside					
Convertible Portfolio	1,070,000	*	54,185	54,185	*
Consulting Group Capital	1,070,000		34,103	34,103	
Markets Funds	350,000	*	17,724	17,724	*
Deephaven Domestic	330,000		17,721	11,121	
Convertible Trading,					
Ltd	870,000	*	44,057	44,057	*
Delta Air Lines Master	,		,	,	
Trust (c/o Oaktree					
Capital Management					
LLC)	285,000	*	44,127	14,432	*
Delta Pilots D & S					
Trust	150,000	*	41,003	7,596	*
Enron North America	1,000,000	*	50,640	50,640	*
Estate of James					
Campbell	46,000	*	2,329	2,329	*
Fidelity Commonwealth					
Trust: Fidelity Small					
Cap Stock Fund	13,450,000	10.8%	681,109	681 , 109	1.4%
Fidelity Financial					
Trust: Fidelity					
Convertible Securities		4 00	000 044	000 044	*
Fund	6,000,000	4.8%	303,841	303,841	*
First Union					
International Capital	10 000 000	0 0%	EOC 401	E06 401	1.0%
Markets(The) Fondren	10,000,000	8.0%	506,401	506,401	1.0%
Foundation	85,000	*	4,304	4,304	*
GM Employees Global Grp	03,000		4,504	4,304	
Pen Tr (Abs Return					
Portfolio)	2,500,000	2.0%	126,600	126,600	*
Hotel Union and Hotel	2,000,000	2.00	120,000	120,000	
Industry of Hawaii					
Pension Plan	265,000	*	13,420	13,420	*
James Campbell					
Corporation	60,000	*	3,038	3,038	*
JMG Capital Partners,					
LP	4,000,000	3.2%	202,560	202,560	*
JMG Triton of Shore Fund					
LTD	4,000,000	3.2%	202,560	202,560	*
Knight Securities,					
L.P	80,000	*	4,051	4,051	*

	Principal Amount	•	Number of		
	at Maturity of		Shares of	Number of	
	Notes		Common Stock	Shares of	
	Beneficially	Percentage	Owned Prior	Common Stock	Percentage of
	Owned That May	of Notes	to the	That May	Common Stock
Name	Be Sold	Outstanding	Offering	Be Sold(1)	Outstanding(2)

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Lipper Convertibles,					
L.P	\$ 1,000,000	*	50,640	50,640	*
McMahan Securities Co.	, , , , , , , , , , , , , , , , , , , ,		,		
L.P	425,000	*	21,522	21,522	*
Microsoft Corporation	600,000	*	30,384	30,384	*
Motion Picture Industry	,		,	,	
Health Plan Active					
Member Fund	100,000	*	13,579	5,064	*
Motion Picture Industry	200,000		10,075	0,001	
Health Plan Retiree					
Member Fund	45,000	*	6,646	2,279	*
OCM Convertible Trust	670,000	*	103,144	•	*
Partner Reinsurance	0707000		100/111	33,323	
Company Ltd	170,000	*	22,583	8,609	*
Pitney Bowes Retirement	170,000		22,303	0,009	
Fund	1,000,000	*	50,640	50,640	*
Ramius Capital Group	225,000	*	11,394	11,394	*
RCG Latitude Master	223,000		11,331	11,001	
Fund, LTD	810,000	*	41,018	41,018	*
RCG Multi Strategy LP	100,000	*	5,064	5,064	*
Retail Clerks Pension	100,000		3,001	3,001	
Trust #2	2,500,000	2.0%	126,600	126,600	*
State Employees'	2,000,000	2.00	120,000	120,000	
Retirement Fund of the					
State of Delaware	435,000	*	67,002	22,028	*
State of Connecticut	100,000		0.,002	22,020	
Combined Investment					
Funds	930,000	*	112,817	47,095	*
TQA Master Fund, LTD	1,000,000	*	50,640	50,640	*
UBS AG London Branch	5,500,000	4.4%	278,521	278,521	*
UBS Warburg LLC f/b/o	2,222,222		,	,,	
UBS Global Equity					
Arbitrage Master LTD	2,000,000	1.6%	101,280	101,280	*
Vanguard Convertible	_, ,		,	,	
Securities Fund,					
Inc	1,515,000	1.2%	192,880	76,720	*
Victory Capital	, ,		,	•	
Management as Agent for					
the Victory Convertible					
Securities Fund	500,000	*	25,320	25,320	*
Vopak USA Inc.,					
Retirement Plan (f.k.a.					
Van Waters & Rogers,					
Inc. Retirement Plan)	340,000	*	17,218	17,218	*
Zurich Institutional	,		•	·	
Benchmarks	104,000	*	5 , 267	5,267	*
Any other holder of					
notes or future					
transferee, pledgee,					
donee or successor of					
any holder(3)(4)	19,496,000	15.6%	987,279	987 , 279	2.0%

^{*} Less than 1%

⁽¹⁾ Assumes conversion of all of the holder's notes at a conversion ratio of 50.6401 shares per \$1,000 principal amount of notes. However, this conversion price will be subject to adjustment as described under "Description of Notes--Conversion of the Notes." As a result, the amount of common stock issuable upon conversion of the notes may increase or

decrease in the future.

- (2) Calculated based on Rule 13d-3(d)(i) of the Exchange Act using 49,034,316 shares of common stock outstanding as of September 14, 2001. In calculating this amount, we treated as outstanding the number of shares of common stock issuable upon conversion of all of that particular holder's notes. However, we did not assume the conversion of any other holder's notes.
- (3) Information about other selling security holders will be set forth in prospectus supplements, if required.
- (4) Assumes that any other holders of notes, or any future transferees, pledgees, donees or successors of or from any of these other holders of notes, do not beneficially own any common stock other than the common stock issuable upon conversion of the notes at the initial conversion ratio.

We prepared this table based on the information supplied to us by the selling securityholders named in the table.

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The selling securityholders listed in the above table may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act, some or all of their notes since the date on which the information in the above table is presented. Information about the selling securityholders may change over time. Any changed information will be set forth to the extent provided to us by the selling securityholders, in prospectus supplements, if and when necessary.

Because the selling securityholders may offer all or some of their notes or the underlying common stock from time to time, we cannot estimate the amount of the notes or underlying common stock that will be held by the selling securityholders upon the termination of any particular offering. See "Plan of Distribution."

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PLAN OF DISTRIBUTION

We are registering the notes and the underlying common stock to allow the selling securityholders and their successors, including their transferees, pledgees and donees and their successors, to sell these securities to the public from time to time after the date of this prospectus. The selling securityholders may sell the securities directly or through underwriters, broker-dealers or agents. If the selling securityholders sell the securities through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agents' commissions. We have agreed to pay substantially all of the expenses incidental to the registration, offering and sale of the securities to the public other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

The total proceeds to the selling securityholders from selling the securities will be the purchase price of the securities, less any discounts and commissions paid by the selling securityholders. We will not receive any of the proceeds from the sale of the securities offered by this prospectus.

The SEC may deem the selling securityholders and any broker-dealers or agents who participate in the distribution of the securities to be "underwriters." As a result, the SEC may deem any profits the selling securityholders make by selling the securities and any discounts, commissions or concessions received by any broker-dealers or agents to be underwriting

discounts and commissions under the Securities Act. Selling securityholders who are "underwriters" will be subject to the prospectus delivery requirements of the Securities Act and may also be subject to liabilities under the securities laws, including Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act. To our knowledge, there are currently no plans, arrangements or understandings between any selling securityholders and any underwriter, broker-dealer or agent regarding the sale of the securities.

The selling securityholders and any other person who participates in distributing the securities will be subject to the Exchange Act. The Exchange Act rules include Regulation M, which may limit the timing of purchases and sales of any of the securities by the selling securityholders and any other person. In addition, Regulation M may restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to the particular securities being distributed for a period of up to five business days before beginning to distribute the securities. This may affect the securities' marketability and the ability of any person or entity to engage in market-making activities with respect to the securities.

The selling securityholders may sell the securities in one or more transactions at:

- . fixed prices;
- . prevailing market prices at the time of sale;
- . varying prices determined at the time of sale; or
- . negotiated prices.

These sales may be effected in transactions:

- . on any national securities exchange or quotation service on which the securities are listed or quoted at the time of the sale, including the Nasdaq National Market in the case of the common stock;
- . in the over-the-counter market;
- in transactions other than transactions on national securities exchanges, quotation services or in the over-the-counter market; or
- . through the writing of options.

These transactions may include block transactions or crosses. Crosses are transactions in which the same broker acts as an agent on both sides of the transaction.

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- enter into hedging transactions with broker-dealers, who may in turn engage in short sales of the securities in the course of hedging the positions they assume;
- . sell the securities short and deliver the securities to close out their short positions; or
- . loan or pledge the securities to broker-dealers, who may in turn sell

the securities.

We cannot assure you that any selling securityholder will sell any or all of the securities using this prospectus. In addition, any securities covered by this prospectus that qualify for sale under Rule 144 or Rule 144A of the Securities Act may be sold under Rule 144 or Rule 144A rather than under this prospectus. The selling securityholders also may transfer, devise or gift the securities by other means not described in this prospectus.

To comply with the securities laws of some states, if applicable, the selling securityholders may only sell the securities in these jurisdictions through registered or licensed brokers or dealers.

Our common stock trades on the Nasdaq National Market under the symbol "KLIC." We do not intend to apply for listing of the notes on any securities exchange or for quotation through Nasdaq. Accordingly, we cannot assure you that selling securityholders will be able to sell the notes or that any trading market for the notes will develop. See "Risk Factors——A public market may not develop for the notes."

With respect to a particular offering of the securities, to the extent required, we will file an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part, disclosing the following information:

- . the specific notes or common stock to be offered and sold;
- . the names of the selling securityholders;
- the respective purchase prices and public offering prices and other material terms of the offering;
- . the names of any participating agents, broker-dealers or underwriters; and
- . any applicable commissions, discounts, concessions and other items constituting compensation from the selling securityholders.

The registration rights agreement filed as an exhibit to this registration statement provides that we and the selling securityholders will indemnify each other and each other's directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act, or that we will be entitled to contribution from each other in connection with these liabilities.

LEGAL MATTERS

Drinker Biddle & Reath LLP, Philadelphia, Pennsylvania will provide us with an opinion as to the validity of our issuance of the securities offered by this prospectus. Drinker Biddle & Reath LLP will rely on the opinion of Howe & Addington LLP, New York, New York with respect to matters of New York law.

EXPERTS

The consolidated financial statements of Kulicke and Soffa Industries, Inc. incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended September 30, 2000 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of Cerprobe Corporation and subsidiaries as of December 31, 1999 and 1998, and for each of the years in the three-year period ended December 31, 1999, which appear in the September 30, 2000 Annual Report of Kulicke and Soffa Industries, Inc., have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent certified public accountants incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy materials that we have filed with the Securities and Exchange Commission at the following Securities and Exchange Commission public reference rooms:

450 Fifth Street, N.W.
Room 1024
Washington, D.C. 20549

500 West Madison Street Suite 1400 Chicago, Illinois 60661

Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the public reference rooms.

Our common stock is quoted on the Nasdaq National Market under the symbol "KLIC," and our Securities and Exchange Commission filings can also be read at the following Nasdaq address:

Nasdaq Operations, 1735 K Street, N.W. Washington, D.C. 20006

Our Securities and Exchange Commission filings are also available to the public on the Securities and Exchange Commission's Internet website at http://www.sec.gov.

The SEC allows us to "incorporate by reference" into this prospectus the information we file with the SEC. This means that we can disclose important information by referring you to those documents. The information we incorporate by reference is considered to be a part of this prospectus. Information that we file later with the SEC will automatically update and supersede the information contained in this prospectus, including the other information incorporated by reference in this prospectus. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the selling securityholders sell all of the notes or the shares of common stock offered by this prospectus:

- . Our Annual Report on Form 10-K for our fiscal year ended September 30, 2000;
- . Our Quarterly Reports on Form 10-Q for our fiscal quarters ended December 31, 2000, March 31, 2001 and June 30, 2001;
- . The information relating to our directors, executive officers and 5% beneficial owners of our common stock contained in our Proxy Statement for our 2001 annual meeting of shareholders;
- . Our Current Reports on Form 8-K filed on October 12, 2000, November 8, 2000, December 6, 2000, December 19, 2000, August 9, 2001, August 10, 2001 and August 24, 2001;

- . Our Current Report on Form 8-K/A filed on January 26, 2001; and
- . The description of our common stock contained in our registration statement on Form 8-A12G/A filed on July 17, 2000.

You may request a copy, at no cost, of any or all of the documents referred to above, other than exhibits to the documents that are not specifically incorporated by reference in the documents. You should direct written or telephone requests to Investor Relations Department, Kulicke and Soffa Industries, Inc., 2101 Blair Mill Road, Willow Grove, Pennsylvania 19090, telephone (215) 784-6000.

You should rely only on the information incorporated by reference or provided in this prospectus. You should not assume the information in this prospectus is accurate as of any date other than the date on the front of those documents. We have not authorized anyone else to provide you with different information.

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PART II INFORMATION NOT REQUIRED IN THE PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The aggregate estimated (other than the registration fee) expenses to be paid by the Registrant in connection with the sale of the notes and common stock being registered are as follows:

Securities and Exchange Commission registration fee
Nasdaq Additional Share Listing Fee
Accounting fees and expenses
Legal fees and expenses
Miscellaneous
Total

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS OF KULICKE & SOFFA

Our By-laws require us to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed proceeding by reason of the fact that he or she is or was our director or officer or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal proceeding, had no reasonable cause to believe his or

\$ 31,25

\$ 17,50

\$ 10,00

\$ 25,00

\$ 5,00

\$ 88,75

her conduct was unlawful. Such indemnification as to expenses is mandatory to the extent the individual is successful on the merits or otherwise in defense of the matter or in defense of any claim, issue or matter therein. In addition, Pennsylvania law permits us to provide similar indemnification to employees and agents who are not directors or officers. Our By-laws provide, however, that we will not indemnify a director who has breached or failed to perform the duties of his office in a manner that constituted self-dealing, willful misconduct or recklessness. The determination of whether an individual meets the applicable standard of conduct set forth in our By-laws may be made by disinterested directors, independent legal counsel or the shareholders. Pennsylvania law also permits indemnification in connection with a proceeding brought by or in our right to procure a judgement in our favor. In addition, the registration rights agreement filed as an exhibit to this registration statement provides that we and the selling securityholders will indemnify each other and each other's directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act, or that we will be entitled to contribution from each other in connection with these liabilities.

ITEM 16. EXHIBITS

The following exhibits are filed with or incorporated by reference in this registration statement:

EXHIBIT NUMBER	EXHIBIT TITLE
3.1	The Company's Form of Amended and Restated Articles of Incorporation
3.2	The Company's By-Laws, as amended through June 26, 1990, filed as Exhibit 2.2 to the Company's Form 8-A12G dated September 11, 1995, SEC file number 000-00121, is incorporated herein by reference.
4.1	Indenture dated as of August 15, 2001 between the Company and Chase Manhattan Trust Company, National Association, as Trustee, filed as Exhibit 4.1 to the Company's Form 8-K dated August 24, 2001, is incorporated herein by reference.
4.2	Registration Rights Agreement dated as of August 15, 2001 between the Company and Morgan Stanley & Co. Incorporated, filed as Exhibit 4.2 to the Company's Form 8-K dated August 24, 2001, is incorporated herein by reference.
4.3	Form of Note (included in Exhibit 4.1)
5.1	Opinion of Drinker Biddle & Reath LLP
12.1	Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants, relating to Kulicke & Soffa Industries, Inc.
23.2	Consent of KPMG LLP, Independent Public Accountants, relating to Cerprobe Corporation
23.3	Consent of Drinker Biddle & Reath LLP (included in Exhibit 5.1)
23.4	Consent of Howe & Addington LLP
24.1*	Power of Attorney of certain directors and officers of Kulicke and Soffa Industries, Inc. (see page II-5 of this Form S-3)
25.1*	Form T-1 Statement of Eligibility of Trustee for Indenture under the Trust Indenture Act of 1939 $$
*	Previously filed.

ITEM 17. UNDERTAKINGS

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (a) To include any prospectus required by Section 10(a)(3) of the Securities $\mbox{Act,}$
 - (b) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement,
 - (c) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that clauses (a) and (b) do not apply if the information required to be included in a post-effective amendment by such clauses is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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(4) That, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 15 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event

that a claim for indemnification against such liabilities, other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding, is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Willow Grove, Commonwealth of Pennsylvania, on October 2, 2001.

KULICKE AND SOFFA INDUSTRIES, INC.

By: /s/ C. Scott Kulicke

C. Scott Kulicke
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Name Capacity

*/s/ C. Scott Kulicke

Chairman and Chief Executive Officer (Principal Executive Officer)

C. Scott Kulicke

*/s/ Philip V. Gerdine

Philip V. Gerdine

*/s/ John A. O'Steen

John A. O'Steen

*/s/ Allison F. Page

Director

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*/s/ MacDonnell Roehm, Jr. Director

MacDonnell Roehm, Jr.

Allison F. Page

*/s/ Larry D. Striplin, Jr. Director

Larry D. Striplin, Jr.

*/s/ C. William Zadel Director

3.1

C. William Zadel

*/s/ Clifford G. Sprague Senior Vice President and Chief Financial Officer (Principal Financial and Accounting

Clifford G. Sprague Officer)

* By: /s/ Clifford G. Sprague (as attorney in fact)
-----Clifford G. Sprague

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* Previously filed.

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