

KULICKE & SOFFA INDUSTRIES INC  
 Form 424B7  
 February 14, 2008  
 Prospectus Supplement No. 4

Filed Pursuant to Rule 424(b)(7)

dated February 13, 2008

Registration No. 333-145510

(to Prospectus dated September 11, 2007)

**\$110,000,000**

**0.875% Convertible Subordinated Notes due 2012 and  
 the Common Stock issuable upon conversion of the Notes**

This prospectus supplement supplements our prospectus dated September 11, 2007 relating to the resale by certain selling securityholders of our 0.875% Convertible Subordinated Promissory Notes due 2012 and the shares of common stock issuable upon conversion of the notes. This prospectus supplement is not complete without, and may not be delivered and should not be used except in connection with, the prospectus. This prospectus supplement is qualified by reference to the prospectus except to the extent that the information in this prospectus supplement supersedes the information contained in the prospectus.

Investing in our shares involves risks. Please read carefully the section of the prospectus entitled *Risk Factors* and the section entitled *Risk Factors* contained in our Annual Report on Form 10-K for the fiscal year ended September 29, 2007 and the other filings we make with Securities and Exchange Commission that are incorporated by reference into this prospectus supplement.

**SELLING SECURITYHOLDERS**

The following table updates the *Selling Securityholders* section of the prospectus dated September 11, 2007 with respect to the beneficial ownership of the selling securityholder named below.

NAME	PRINCIPAL AMOUNT OF NOTES BENEFICIALLY OWNED THAT MAY BE SOLD (\$)	PERCENTAGE OF NOTES OUTSTANDING	NUMBER OF SHARES OF COMMON STOCK OWNED PRIOR TO THE OFFERING <sup>(1)</sup>	NUMBER OF SHARES OF COMMON STOCK THAT MAY BE SOLD <sup>(1)</sup>	PERCENTAGE OF COMMON STOCK OUTSTANDING <sup>(2)</sup>
Credit Suisse Securities (USA) LLC. <sup>(3)</sup>	\$ 2,000,000	1.8%	139,324	139,324	*

\* Less than 1%.

- (1) Assumes conversion of all of the holder's notes at a conversion rate of 69.6621 shares per \$1,000 principal amount of notes, conversion of all of the 0.5% Convertible Subordinated Notes due 2008 held by such holder at a conversion rate of 49.1884 shares per \$1,000 principal amount of the 0.5% Convertible Subordinated Notes and conversion of all of the 1.0% Convertible Subordinated Notes due 2010 held by such holder at a conversion rate of 77.8743 shares per \$1,000 principal amount of the 1.0% Convertible Subordinated Notes. The conversion rate of the notes, the 0.5% Convertible Subordinated Notes and the 1.0% Convertible Subordinated Notes are subject to adjustment. As a result, the number of shares of common stock issuable upon conversion of the notes, the 0.5% Convertible Subordinated Notes or 1.0% Convertible Subordinated Notes may increase or decrease in the future. See Description of the Notes Conversion Rights.
- (2) Calculated based on Rule 13d-3(d)(1)(i) of the Securities Exchange Act of 1934, as amended (the Exchange Act ) using 53,371,044 million shares of common stock outstanding as of February 1, 2008. 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, 0.5% Convertible Subordinated Notes due 2008 and 1.0% Convertible Subordinated Notes due 2010. However, we did not assume the conversion of any other holder's notes, 0.5% Convertible Subordinated Notes or 1.0% Convertible Subordinated Notes.
- (3) The selling securityholder has indicated that Credit Suisse Securities (USA) LLC is a registered broker-dealer pursuant to Section 15 of the Exchange Act. The selling securityholder has represented that it has acquired its securities in the ordinary course of business and, at the time of the acquisition of the securities, it has no agreements or understandings, directly or indirectly with any person to distribute the securities.

We prepared this prospectus supplement based on the information supplied to us by the selling securityholder named in the table. The information provided in this prospectus supplement is current as of February 13, 2008.

The selling securityholders listed above and in the prospectus may have sold or transferred some or all of their notes or the underlying common stock since the date on which they provided us with information regarding their notes and common stock, and we have not made any independent inquiries as to the foregoing. Information about selling securityholders may change over time. Any changed information will be set forth to the extent provided to us by the selling securityholders, in further supplements to the prospectus, if and when necessary.

Because the selling securityholders listed above and in the prospectus 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 in the prospectus and below.

#### PLAN OF DISTRIBUTION

Any selling securityholder that is a broker-dealer may be deemed to be an underwriter within the meaning of Section 2(11) of the Securities Act of 1933, as amended (the Securities Act ) with respect to the securities it sells pursuant to the prospectus. 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 who participate in the distribution of the securities to be underwriting discounts and commissions under the Securities Act. Selling securityholders who are underwriters within the meaning of Section 2(11) of the Securities Act 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 following additional selling securityholder has identified itself as a registered broker-dealer: Credit Suisse Securities (USA) LLC. For details about the amount of notes and number of shares beneficially owned and being offered by this selling securityholder, see Selling Securityholders above.