

## KULICKE &amp; SOFFA INDUSTRIES INC

Form 424B7

October 29, 2007

Prospectus Supplement No. 2

Filed Pursuant to Rule 424(b)(7)

dated October 29, 2007

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**

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. 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 30, 2006 and the other filings we make with Securities and Exchange Commission that are incorporated by reference into this prospectus supplement.

| NAME  | PRINCIPAL<br>AMOUNT OF<br>NOTES<br>BENEFICIALLY<br>OWNED<br>THAT<br>MAY BE SOLD (\$) | PERCENTAGE<br>OF NOTES<br>OUTSTANDING | NUMBER OF<br>SHARES OF<br>COMMON<br>STOCK OWNED<br>PRIOR TO THE<br>OFFERING <sup>(1)</sup> | NUMBER OF<br>SHARES OF<br>COMMON<br>STOCK THAT<br>MAY BE SOLD <sup>(1)</sup> | PERCENTAGE OF<br>COMMON STOCK<br>OUTSTANDING <sup>(2)</sup> |
|---|--|---------------------------------------|--|--|---|
| Gabelli Capital Structure Arbitrage Master, Ltd. <sup>(3)</sup> | \$ 1,500,000   | 1.4%                                  | 104,493  | 104,493  | *   |

\* Less than 1%

<sup>(1)</sup> 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 Exchange Act using 53,913,232 million shares of common stock outstanding as of August 14, 2007. 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 Vincent Roche, Portfolio Manager, has voting and investment control over the notes and common stock issuable upon conversion of the notes held by Gabelli Capital Structure Arbitrage Master, Ltd. The selling securityholder has represented that it is an affiliate of a registered broker-dealer, Gabelli & Co., and that its adviser, Gabelli Securities, Inc. is an SEC reporting company. The selling securityholder has indicated 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 agreement or understanding, 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 October 29, 2007.

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.