

KULICKE & SOFFA INDUSTRIES INC  
 Form 424B7  
 April 29, 2009  
 Prospectus Supplement No. 2  
 dated April 29, 2009  
 (to Prospectus dated October 27, 2008)

Filed Pursuant to Rule 424(b)(7)  
 Registration No. 333-154774

7,117,438 Common Shares

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This prospectus supplement supplements our prospectus dated October 27, 2008, as supplemented by Prospectus Supplement No. 1 dated February 4, 2009, relating to the resale by the selling shareholders identified therein of 7,117,438 shares of our common stock. 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 27, 2008 and the other filings we make with the Securities and Exchange Commission that are incorporated by reference into this prospectus supplement.

#### SELLING SHAREHOLDERS

The following table updates and amends the "Selling Shareholders" section of the prospectus to reflect a distribution by OE Holdings, Inc. (formerly named Orthodyne Electronics Corporation) of 2,711,491 shares of our common stock to three of its shareholders, Gregg Kelly, William Larkin and Jason Livingston, pursuant to an exemption from registration under the Securities Act of 1933, as amended.

NAME	NUMBER OF SHARES OF COMMON STOCK OWNED BEFORE THE OFFERING	NUMBER OF SHARES OF COMMON STOCK THAT MAY BE SOLD	NUMBER OF SHARES OF COMMON STOCK OWNED AFTER THE OFFERING	PERCENTAGE OF COMMON STOCK OUTSTANDING OWNED AFTER THE OFFERING (1)(2)
Gregg Kelly(3)	1,247,603	1,247,603	0	*
William Larkin	833,895	809,943	23,952	*
Jason Livingston	653,945	653,945	0	*

\*Less than 1%.

- (1) Calculated based on Rule 13d-3(d)(1)(i) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) using 61,056,098 shares of common stock outstanding as of April 29, 2009.
- (2) Assumes that each selling shareholder sells all shares registered under the registration statement. To our knowledge, there are no agreements, arrangements or understandings with respect to the sale of any of our common stock, and each selling shareholder may decide not to sell the shares that are registered under the registration statement.
- (3) Mr. Kelly is the direct beneficial owner of 1,247,603 shares being registered under this prospectus supplement. Due to his position and stock ownership in OE Holdings, Inc., Mr. Kelly is also the indirect beneficial owner of 1,198,773 shares held by OE Holdings, Inc.

We prepared this prospectus supplement based on the information supplied to us by the selling shareholders named in the table. The information provided in this prospectus supplement is current as of April 29, 2009.

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

Because the selling shareholders listed above and in the prospectus may offer all or some of their common stock from time to time, we cannot estimate the amount of common stock that will be held by the selling shareholders upon the termination of any particular offering. See “Plan of Distribution” in the prospectus.