**UNITED STATES** 

Registration No. 333-154774

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

POST-EFFECTIVE AMENDMENT NO. 1

TO

FORM S-3

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)	24-1498399  (I.R.S. Employer Identification Number)	
		Joseph Elgindy
		<b>Investor Relations</b>
6 Serangoon North Avenue 5, #03-16		Kulicke and Soffa Industries, Inc.
Singapore 554910		1005 Virginia Drive
(215) 245-9100		Fort Washington, Pennsylvania 19034
(Address, Including Zip Code, and Telephone Number,		(215) 245-9100
Including Area Code, of Registrant's Principal		(Name, Address, Including Zip Code, and Telephone
Executive Offices)		Number, Including Area Code, of Agent for Service)
Copy to:		
F. Douglas Raymond, III, Esq.		
Drinker Biddle & Reath LLP		
One Logan Square		
Philadelphia, PA 19103-6996		
(215) 988-2548		

**Approximate date of commencement of proposed sale to the public:** This Post-Effective Amendment No. 1 to Form S-3 Registration Statement deregisters those securities that remain unsold hereunder as of the effective date hereof.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

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, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer: x Accelerated filer: "

Non-accelerated filer: " Smaller reporting company: "

(Do not check if a smaller reporting company)

#### **DEREGISTRATION OF SECURITIES**

Kulicke and Soffa Industries, Inc. (the "Company") initially filed a Registration Statement on Form S-3 (file no. 333-154774) with the Securities and Exchange Commission on October 27, 2008 (the "Registration Statement), pursuant to which the Company registered 7,117,438 shares of common stock, no par value (the "Shares").

This Post-Effective Amendment No. 1 to the Registration Statement is being filed to deregister all of the Shares that were registered pursuant to the Registration Statement and that remain unsold thereunder as of the date hereof.

The Company's contractual obligation to maintain the effectiveness of the Registration Statement has expired. Accordingly, pursuant to the undertaking of the Company as required by Item 512(a)(3) of Regulation S-K, the Company hereby amends the Registration Statement by deregistering all of the Shares that were registered but unsold under the Registration Statement.

- 3 -

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No.1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Singapore, on November 16, 2012.

#### KULICKE AND SOFFA INDUSTRIES, INC.

By: /s/ Lester Wong Lester Wong Senior Vice President, Legal Affairs and General Counsel

- 4 -