NATIONAL SEMICONDUCTOR CORP Form POSASR May 28, 2010

As filed with the Securities and Exchange Commission on May 28, 2010

Registration No. 333-143571

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 [Missing Graphic Reference] Post-Effective

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Amendment No. 2

to

Form S-3

REGISTRATION STATEMENT

Under

THE SECURITIES ACT OF 1933

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National Semiconductor Corporation

(Exact name of registrant as specified in its charter)

Delaware

95-2095071

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer

Identification Number)

2900 Semiconductor Drive, P.O. Box 58090 Santa Clara, California 95052-8090

(408) 721-5000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Agent for Service:

Copies to:

Todd M. DuChene, Esq.

Barry A. Bryer, Esq.

Senior Vice President, General Counsel and

Ora T. Fisher, Esq.

Secretary

Steven B. Stokdyk, Esq.

National Semiconductor Corporation

Latham & Watkins LLP

2900 Semiconductor Drive, P.O. Box 58090

140 Scott Drive

Santa Clara, California 95052-8090

Menlo Park, California 94401

ara, Camorna 23032 0070

(650) 328-4600

(408) 721-5000

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

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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. o

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. o

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. x

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 Non-accelerated filer o (Do not check if a smaller reporting company) Accelerated filer o Smaller reporting company o

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EXPLANATORY NOTE

This Post-Effective Amendment No. 2 relates to the Registration Statement on Form S-3 (File No. 333-143571) filed by National Semiconductor Corporation (the "Company") with the Securities and Exchange Commission on June 7, 2007, as amended by Post-Effective Amendment No. 1 filed on June 8, 2007 (together, the "Registration Statement"), in connection with the registration under the Securities Act of 1933, as amended (the "Act"), and the offer, issuance and sale from time to time on a delayed or continuous basis pursuant to Rule 415 under the Act, of an indeterminate amount of the Company's debt securities. The Company is filing this Post-Effective Amendment No. 2 in order to terminate the effectiveness of the Registration Statement and to deregister all unsold debt securities thereunder.

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SIGNATURES

Pursuant to the requirements of the Act and Rule 478 thereunder, National Semiconductor Corporation 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 Post-Effective Amendment No. 2 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Clara, State of California, on May 28, 2010.

National Semiconductor Corporation

By:

Lewis Chew Senior Vice President, Finance and Chief Financial Officer

Note: Pursuant to Rule 478 under the Act, no other person is required to sign this Post-Effective Amendment No. 2 to the Registration Statement.

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