

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 4

TO

FORM S-8

**REGISTRATION STATEMENT UNDER THE
SECURITIES ACT OF 1933**

FORMFACTOR, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other Jurisdiction of Incorporation or Organization)

13-3711155

(I.R.S. Employer Identification No.)

**7005 Southfront Road
Livermore, California 94551**

(Address, including Zip Code, of Principal Executive Offices)

**1996 Stock Option Plan
Incentive Option Plan**
(Full Title of the Plan)

**Michael M. Ludwig
Chief Financial Officer
FormFactor, Inc.**

**7005 Southfront Road
Livermore, California 94551
(925) 290-4000**

(Name, Address and Telephone Number of Agent for Service)

Copy to:

**William M. Kelly
Davis Polk & Wardwell
1600 El Camino Real
Menlo Park, California 94025
(650) 752-2000**

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.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

EXPLANATORY NOTE

Deregistration of Shares

FormFactor, Inc. (the "Registrant") is filing this Post-Effective Amendment No. 4 to Form S-8 Registration Statement to deregister 29,393 shares of the Registrant's common stock, par value \$0.001 per share, previously registered for offer and sale under the Registrant's 1996 Stock Option Plan and Incentive Option Plan.

On June 12, 2003, the Registrant filed a Form S-8 Registration Statement (Registration No. 333-106043) pursuant to which it registered an aggregate of 11,007,837 shares of common stock under its 2002 Equity Incentive Plan (the "2002 Plan"), the 1996 Stock Option Plan, Incentive Option Plan and Management Incentive Option Plan (collectively the "Prior Plans"), and other equity plans. On February 27, 2009, the Registrant filed Post-Effective Amendment No. 1 to Form S-8 Registration Statement to deregister 324,548 shares of common stock, previously registered for offer and sale under its 1995 Stock Plan and 1996 Stock Option Plan. On February 24, 2010, the Registrant filed Post-Effective Amendment No. 2 to Form S-8 Registration Statement to deregister 208,217 shares of common stock previously registered for offer and sale under its 1996 Stock Option Plan and Incentive Option Plan. On February 17, 2011, the Registrant filed Post-Effective Amendment No. 3 to Form S-8 Registration Statement to deregister 363,697 shares of the Registrant's common stock previously registered for offer and sale under its 1996 Stock Option Plan, Incentive Option Plan and Management Incentive Option Plan.

The 2002 Plan, which became effective in connection with the Registrant's initial public offering under the Securities Act of 1933, as amended, serves as the successor to the Registrant's Prior Plans and other previously existing equity plans. Following the 2002 Plan's effectiveness, the Registrant has not granted any equity options under the Prior Plans; however, any issued equity options under these plans remained outstanding until the options were exercised or until the options expired, were canceled or terminated by their terms. Under the 2002 Plan, any shares issued under the Prior Plans that are forfeited or repurchased by the Registrant or that are issuable upon exercise of equity options granted under the Prior Plans that expire or become unexercisable for any reason become available for grant under the 2002 Plan. The deregistered shares represent shares subject to equity options granted under the Prior Plans that expired, were canceled or terminated without having been exercised (the "Carried Forward Shares").

The Registrant is filing this Post-Effective Amendment No. 4 to deregister the Carried Forward Shares. The Registrant is filing a separate Form S-8 Registration Statement to register the Carried Forward Shares for grant under the 2002 Plan.

Item 8. Exhibits.

24.01 Power of Attorney (included on signature page of this Registration Statement).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 4 to Form S-8 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Livermore, State of California, on this 17th day of February, 2012.

FORMFACTOR, INC.

By: /s/ STUART L. MERKADEAU
 Name: Stuart L. Merkadeau
 Title: Senior Vice President, General Counsel and Secretary

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Michael M. Ludwig and Stuart L. Merkadeau and each of them, his/her true and lawful attorneys-in-fact and agents with full power of substitution, for him/her and in his/her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this Registration Statement, and to file the same, with all exhibits thereto and all documents in connection therewith, making such changes to this Registration Statement as such attorneys-in-fact and agents so acting deem appropriate, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act requisite and necessary to be done with respect to this Registration Statement, including amendments, as fully to all intents and purposes as he/she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his/her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated.

Pursuant to the requirements of the Securities Act, this Post-Effective Amendment No. 4 to Form S-8 Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ THOMAS ST. DENNIS</u> Thomas St. Dennis	Chief Executive Officer (Principal Executive Officer) and Director	February 17, 2012
<u>/s/ MICHAEL M. LUDWIG</u> Michael M. Ludwig	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 17, 2012
<u>/s/ G. CARL EVERETT, JR.</u> G. Carl Everett, Jr.	Director	February 17, 2012
<u>/s/ RICHARD DELATEUR</u> Richard DeLateur	Director	February 17, 2012
<u>/s/ LOTHAR MAIER</u> Lothar Maier	Director	February 17, 2012
<u>/s/ JAMES A. PRESTRIDGE</u> James A. Prestridge	Director	February 17, 2012

/s/ EDWARD ROGAS, JR.

Edward Rogas, Jr.

Director

February 17, 2012

/s/ MICHAEL W. ZELLNER

Michael W. Zellner

Director

February 17, 2012

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EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit Title</u>
24.01	Power of Attorney (included on signature page of this Registration Statement).

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