

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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)

**2002 Equity Incentive Plan
2002 Employee Stock Purchase Plan**

(Full Title of the Plan)

**Jean B. Vernet
Chief Financial Officer and Senior Vice President
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 LLP
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)

CALCULATION OF REGISTRATION FEE

Title of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share, to be issued under the 2002 Equity Incentive Plan	2,696,397(2) \$	16.76 \$	45,191,613.72 \$	3,222.16(4)
Common Stock, \$0.001 par value per share, to be issued under the 2002 Employee Stock Purchase Plan	497,636(3) \$	14.25 \$	7,089,322.46 \$	505.47(5)
Total	3,194,033		\$	3,727.63

- (1) This Registration Statement shall cover any additional shares of Common Stock which become issuable under the Registrant's 2002 Equity Incentive Plan and 2002 Employee Stock Purchase Plan by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without receipt of consideration that results in an increase in the number of outstanding shares of the Registrant's Common Stock.
- (2) Represents (i) 2,488,180 shares that constitute the automatic increase in the number of shares available for issuance under the Registrant's 2002 Equity Incentive Plan equal to 5% of 49,763,608 shares, the total outstanding shares of the Registrant as of December 31, 2009, which automatic increase was effective as of January 1, 2010, and (ii) 208,217 shares that were previously registered for offer and sale under the Registrant's 1996 Stock Option Plan and Incentive Option Plan on the Registrant's Form S-8 Registration Statement (Registration No. 333-106043), which were deregistered by the Registrant through the filing of Post-Effective Amendment No. 2 to Form S-8 Registration Statement (Registration No. 333-106043) and are available for grant under the 2002 Equity Incentive Plan pursuant to such plan's terms.

- (3) Represents an automatic increase in the number of shares available for issuance under the Registrant's 2002 Employee Stock Purchase Plan equal to 1% of 49,763,608 shares, the total outstanding shares of the Registrant as of December 31, 2009. This automatic increase was effective as of January 1, 2010.
 - (4) Estimated solely for the purpose of calculating the registration fee in accordance with Rules 457(c) and 457(h) under the Securities Act of 1933, and based upon the average of the high and low sales prices of the Registrant's Common Stock as reported by the Nasdaq Global Market on February 19, 2010.
 - (5) Estimated solely for the purpose of calculating the registration fee in accordance with Rules 457(c) and 457(h) under the Securities Act of 1933, based upon 85% of the average of the high and low sales prices of the Registrant's Common Stock as reported by the Nasdaq Global Market on February 19, 2010. Pursuant to the 2002 Employee Stock Purchase Plan, the purchase price of a share is 85% of the fair market value of the Common Stock.
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PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Securities and Exchange Commission (the "Commission") are incorporated herein by reference.

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 26, 2009 filed on February 24, 2010 pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act");
- (b) The Registrant's Current Report on Form 8-K (Item 5.02 only) filed on January 28, 2010 pursuant to the Exchange Act; and
- (c) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A filed on June 6, 2003 pursuant to the Exchange Act.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered herein have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended (the "Securities Act").

As permitted by the Delaware General Corporation Law, the Registrant's certificate of incorporation includes a provision that eliminates the personal liability of its directors for monetary damages for breach of fiduciary duty as a director, except for liability:

- for any breach of the director's duty of loyalty to the Registrant or its stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; or
- for any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the Registrant's bylaws provide that:

- the Registrant is required to indemnify its directors and officers to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions where indemnification is not permitted by applicable law;

- the Registrant is required to advance expenses, as incurred, to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to certain limited exceptions; and
- the rights conferred in the bylaws are not exclusive.

In addition, the Registrant has entered into indemnity agreements with each of its directors and certain of its officers. The indemnification agreements provide indemnification to such directors and officers under certain circumstances for expenses and liabilities incurred in connection with actions or proceedings brought against them by reason of the fact that they are or were agents of the Registrant.

The Registrant has obtained directors' and officers' insurance to cover its directors and officers for certain liabilities.

The Registrant has entered into agreements with certain of its stockholders, including Benjamin N. Eldridge, an officer of the Registrant, pursuant to which the stockholders have piggyback registration rights with respect to certain of their shares. If a stockholder agrees to participate in a piggyback registration, the Registrant has agreed to indemnify the stockholder against all claims, losses, damages and liabilities regarding any material misstatement or omission by the Registrant in the registration-related documents, and any violation of the Securities Act by the Registrant in connection with the registration, subject to certain limitations.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

3.01(1)	Amended and Restated Certificate of Incorporation of the Registrant as filed with the Delaware Secretary of State on June 17, 2003.
3.02(2)	Amended and Restated Bylaws of the Registrant.
4.01(3)	Specimen Common Stock Certificate.
5.01	Opinion of Counsel.
23.01	Consent of Counsel (included in Exhibit 5.01).
23.02	Consent of Independent Registered Public Accounting Firm.
24.01	Power of Attorney (included on signature page of this Registration Statement).
99.01(4)	2002 Equity Incentive Plan, as amended, and forms of plan agreements.
99.02(5)	2002 Employee Stock Purchase Plan, as amended.

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- (1) Incorporated by reference to the exhibit of the same number in the Registrant's Form S-1 Registration Statement (Registration No. 333-109815), declared effective by the Commission on November 4, 2003.
 - (2) Incorporated by reference to the exhibit of the same number in the Registrant's Current Report on Form 8-K filed with the Commission on May 25, 2005.
 - (3) Incorporated by reference to the exhibit of the same number in the Registrant's Form S-1 Registration Statement (Registration No. 333-86738), declared effective by the Commission on June 11, 2003.
 - (4) Incorporated by reference to Exhibit 10.06 of the Registrant's Annual Report on Form 10-K for the fiscal year ended December 26, 2009 filed with the Commission on February 24, 2010.
 - (5) Incorporated by reference to Exhibit 10.01 of the Registrant's Quarterly Report on Form 10-Q/A for the fiscal quarter ended June 30, 2007 filed with the Commission on November 13, 2007.

Item 9. Undertakings.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and
 - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to the information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under "Item 6 — Indemnification of Directors and Officers" above, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Livermore, State of California, on this 24th day of February, 2010.

FORMFACTOR, INC.

By: /s/ JEAN B. VERNET

Name: Jean B. Vernet

Title: Chief Financial Officer and Senior Vice President

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Jean B. Vernet 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 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 Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MARIO RUSCEV</u> Dr. Mario Ruscev	Chief Executive Officer and Director (Principal Executive Officer)	February 24, 2010
<u>/s/ JEAN B. VERNET</u> Jean B. Vernet	Chief Financial Officer (Principal Financial and Accounting Officer)	February 24, 2010
<u>/s/ HOMA BAHRAMI</u> Dr. Homa Bahrami	Director	February 24, 2010
<u>/s/ G. CARL EVERETT, JR.</u> G. Carl Everett, Jr.	Director	February 24, 2010
<u>/s/ CHENMING HU</u> Dr. Chenming Hu	Director	February 24, 2010
<u>/s/ LOTHAR MAIER</u> Lothar Maier	Director	February 24, 2010

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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JAMES A PRESTRIDGE</u> James A. Prestridge	Director	February 24, 2010
<u>/s/ HARVEY A. WAGNER</u> Harvey A. Wagner	Director	February 24, 2010

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EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit Title</u>
5.01	Opinion of Counsel.
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OPINION OF COUNSEL

[Davis Polk & Wardwell LLP Letterhead]

February 24, 2010

FormFactor, Inc.
7005 Southfront Road
Livermore, California 94551

Ladies and Gentlemen:

FormFactor, Inc., a Delaware corporation (the “Company”) is filing with the Securities and Exchange Commission a Registration Statement on Form S-8 (the “Registration Statement”) for the purpose of registering under the Securities Act of 1933, as amended (the “Securities Act”), an aggregate of 3,194,033 shares of its common stock, par value \$0.001 per share (the “Common Stock”), consisting of 2,696,397 shares issuable pursuant to the 2002 Equity Incentive Plan (as amended, the “Equity Plan”) and 497,636 shares issuable pursuant to the 2002 Employee Stock Purchase Plan (as amended, the “ESPP” and, together with the Equity Plan, the “Plans”), as described in the Registration Statement.

We, as your counsel, have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents and corporate records and such matters of fact and law that we have deemed necessary or advisable for the purpose of rendering the opinion expressed herein. Based on the foregoing, we advise you that, in our opinion, when the Common Stock has been duly issued and delivered in accordance with the terms and conditions of the Plans, the Common Stock will be validly issued, fully paid and non-assessable.

We are members of the Bars of the States of New York and California and the foregoing opinion is limited to the federal laws of the United States and the General Corporation Law of the State of Delaware.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement referred to above. In giving this consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ DAVIS POLK & WARDWELL LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of FormFactor, Inc. of our report dated February 24, 2010 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in FormFactor's Annual Report on Form 10-K for the year ended December 26, 2009.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
February 24, 2010
