

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-8

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

FORM FACTOR, 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 of principal executive offices)

**2002 Employee Incentive Plan
2002 Employee Stock Purchase Plan**
(Full title of the plan)

**Richard DeLateur
7005 Southfront Road
Livermore, California 94551
(925) 290-4000**
(Telephone number, including area code, of agent for service)

**Copy to:
Alan Talkington, Esq.**
Orrick, Herrington & Sutcliffe LLP
The Orrick Building
405 Howard Street
San Francisco, California 94105
(415) 773-5700

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, to be issued under the 2002 Employee Incentive Plan	2,888,092(2) \$	9.23 \$	\$ 26,642,649	\$ 3,093.21(4)
Common Stock, \$0.001 par value, to be issued under the 2002 Employee Stock Purchase Plan	504,879(3) \$	7.84 \$	\$ 3,958,882	\$ 459.63(5)
Total	3,392,971		\$	3,552.84

- (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) 2,524,395 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 50,487,917 shares, the total outstanding shares of the Registrant as of December 31, 2010, which automatic increase was effective as of January 1, 2011, and (ii) 363,697 shares that were previously registered for offer and sale under the Registrant's 1996 Stock Option Plan, Incentive Option Plan and Management 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. 3 to Form S-8 Registration Statement (Registration No. 333-106043) and are available for grant under the 2002 EIP 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 50,487,917 shares, the total outstanding shares of the Registrant as of December 31, 2010. This automatic increase was effective as of January 1, 2011.
 - (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, as amended, 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 10, 2011.
 - (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, as amended, 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 10, 2011. 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.
-
-

PART I

Item 1. **Plan Information.***

Item 2. **Registrant Information and Employee Plan Annual Information.***

* Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act and the Note to Part I of Form S-8.

PART II

Item 3. **Incorporation of Documents by Reference.**

The following documents filed with the Securities and Exchange Commission (the "Commission") are hereby incorporated by reference in this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 25, 2010 filed on February 17, 2011 which contains audited financial statements for the most recent fiscal year for which such statements have been filed;
- (b) All other reports filed by the Registrant pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the fiscal year covered by the Registrant document referred to in (a) above; 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 (File No. 000-50307) filed pursuant to Section 12(g) the Exchange Act, and any amendments or reports filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15 (d) of the Exchange Act after the date hereof, and prior to the filing of a post-effective amendment which indicates that the securities offered hereby have been sold or which deregisters the securities covered hereby then remaining unsold, shall also be deemed incorporated by reference in this Registration Statement and to be a part hereof commencing on the respective dates on which such documents are filed.

Any statement contained in a document 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 in a subsequently filed document which is also incorporated by reference herein modifies or supersedes such 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.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Description
5.1	Opinion of Orrick, Herrington & Sutcliffe LLP
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Orrick, Herrington & Sutcliffe LLP (included in opinion filed as Exhibit 5.1)
24.1	Power of Attorney (see signature page)
99.1	2002 Employee Incentive Plan, as amended (incorporated by reference to Exhibit 10.06 to the Registrant's Annual Report on Form 10-K filed with the Commission on February 17, 2011 (File No. 000-50307))
99.2	2002 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.01 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on August 7, 2007 (File No. 000-50307))

Item 9. Undertakings.

(a) 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 therein any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in such prospectus any facts or events arising after the effective date of this 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 herein; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that clauses (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those clauses is contained in periodic 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 into this Registration Statement;

(2) that, for purposes 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; and

(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 Plan.

(b) 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 into this 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.

(c) Insofar as the indemnification for liabilities arising under the Securities Act may be permitted for directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, 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 a successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, 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 of 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.

4

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, California, on this 17th day of February, 2011.

FORMFACTOR, INC.

By: /s/ STUART L. MERKADEAU
Stuart L. Merkadeau
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 Richard DeLateur 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 of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ THOMAS ST. DENNIS</u> Thomas St. Dennis	Director and Chief Executive Officer (Principal Executive Officer)	February 17, 2011
<u>/s/ RICHARD DELATEUR</u> Richard DeLateur	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 17, 2011
<u>/s/ G. CARL EVERETT, JR.</u> Carl Everett, Jr.	Director	February 17, 2011
<u>/s/ LOTHAR MAIER</u> Lothar Maier	Director	February 17, 2011
<u>/s/ JAMES A. PRESTRIDGE</u> James A. Prestridge	Director	February 17, 2011

EXHIBIT INDEX

Exhibit Number	Description
5.1	Opinion of Orrick, Herrington & Sutcliffe LLP
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Orrick, Herrington & Sutcliffe LLP (included in opinion filed as Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
99.1	2002 Employee Incentive Plan, as amended (incorporated by reference to Exhibit 10.06 to the Registrant's Annual Report on Form 10-K filed with the Commission on February 17, 2011 (File No. 000-50307))
99.2	2002 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.01 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on August 7, 2007 (File No. 000-50307))



ORRICK, HERRINGTON & SUTCLIFFE LLP THE
 ORRICK BUILDING
 405 HOWARD STREET
 SAN FRANCISCO, CALIFORNIA 94105-2669
tel 415-773-5700
fax 415-773-5759
WWW.ORRICK.COM

February 17, 2011

FormFactor, Inc.
 7005 Southfront Road
 Livermore, California 94551

Re: FormFactor, Inc. Registration Statement on Form S-8

Ladies and Gentlemen:

At your request, we are rendering this opinion in connection with the proposed issuance pursuant to the 2002 Equity Incentive Plan (the "2002 EIP") and pursuant to a Registration Statement on Form S-8 (the "Registration Statement") of up to 2,888,092 shares of common stock, \$0.001 par value ("EIP Shares"), of FormFactor, Inc., a Delaware corporation (the "Company"), and the proposed issuance pursuant to the 2002 Employee Stock Purchase Plan (the "2002 ESPP" and together with the EIP, the "Plans") and the Registration Statement of up to 504,879 shares of common stock, \$0.001 par value (the "ESPP Shares" and together with the EIP Shares, the "Shares"), of the Company.

We have examined instruments, documents, and records which we deemed relevant and necessary for the basis of our opinion hereinafter expressed. In such examination, we have assumed the following: (a) the authenticity of original documents and the genuineness of all signatures; (b) the conformity to the originals of all documents submitted to us as copies; and (c) the truth, accuracy and completeness of the information, representations and warranties contained in the records, documents, instruments and certificates we have reviewed.

Based on such examination, we are of the opinion that the Shares to be issued by the Company pursuant to the applicable Plan are duly authorized, and, when issued in accordance with the provisions of the applicable Plan and the Registration Statement, will be legally issued, fully paid, and nonassessable.

In rendering this opinion, we have assumed that (i) the Registration Statement becomes and remains effective during the period when the Shares are offered, issued and sold, (ii) the Shares to be sold are issued in accordance with the terms of the applicable Plan, (iii) the Company receives the full consideration for the Shares as stated in the applicable Plan, (iv) the per share consideration for each Share includes payment of cash or other lawful consideration at least equal to the par value of the Company's Common Stock, and (v) all applicable securities laws are complied with.

We hereby consent to the filing of this opinion as an exhibit to the above-referenced Registration Statement and to the use of our name wherever it appears in said Registration Statement, including any prospectus constituting a part thereof, as originally filed or as subsequently amended or supplemented. In giving such consent, we do not consider that we are "experts" within the meaning of such term as used in the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission issued thereunder, with respect to any part of the Registration Statement, including this opinion as an exhibit or otherwise.

Very truly yours,

/s/ Orrick, Herrington & Sutcliffe LLP

Orrick, Herrington & Sutcliffe 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 17, 2011 relating to the financial statements 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 25, 2010.

/s/ PricewaterhouseCoopers LLP

San Jose, California
February 17, 2011
