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 (925) 90-4000

(Address of Principal Executive Offices)

Employee Stock Purchase Plan (Full Title of the Plan)

Shai Shahar Chief Financial Officer FormFactor, Inc. 7005 Southfront Road Livermore, California 94551 (925) 290-4000

Copy to:
Sarah K. Solum
Davis Polk & Wardwell
1600 El Camino Real
Menlo Park, California 94025
(650) 752-2000

(Name, address and telephone number, including area code, of agents for service of agent for service)

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

Large accelerated filer 🗵				Accelerated filer ⊔			
Non-accelerated filer \square (Do not check if a smaller reporting company)					r reporting com		
					Emerg	ing growth com	pany 🗆
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If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \square

CALCULATION OF REGISTRATION FEE

		Proposed		
		Maximum	Proposed Maximum	
	Amount To Be	Offering Price Per	Aggregate Offering	Amount Of
Title Of Each Class Of Securities To Be Registered	Registered(1)	Share(2)	Price(2)	Registration Fee(2)
Common Stock, \$0.001 par value	3,000,000(3)	\$12.90	\$38,700,000.00	\$4,818.15

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of Registrant's common stock that become issuable under the plan set forth herein by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of Registrant's common stock, as applicable.
- Calculated solely for purposes of calculating the amount of the registration fee under Rule 457(h) of the Securities Act of 1933, as amended, on the basis of the average of the high and low selling prices per share of the Registrant's Common Stock on July 26, 2018 as reported by the Nasdaq Global Market.
- (3) Represents an increase in the number of shares available for issuance under the Registrant's Employee Stock Purchase Plan based on the amendment and restatement of the Registrant's Employee Stock Purchase Plan effective as of May 18, 2018.

EXPLANATORY NOTE

Pursuant to General Instruction E on Form S-8, this Registration Statement is being filed for the purpose of registering an additional 3,000,000 shares of common stock of FormFactor, Inc. (the "Registrant") issuable pursuant to the Registrant's Employee Stock Purchase Plan. These additional shares of common stock are securities of the same class and relate to the same employee benefit plan (as amended from time to time) as other securities for which registration statements on Form S-8 have been filed with the Securities and Exchange Commission on May 15, 2012 (File No. 333-181450), February 21, 2012 (File No. 333-179589), February 17, 2011 (File No. 333-172318), February 24, 2010 (File No. 333-165058), February 27, 2009 (File No. 333-157610), February 27, 2008 (File No. 333-149411), December 19, 2007 (File No. 333-148198), December 1, 2006 (File No. 333-139074), June 17, 2005 (File No. 333-125918), May 4, 2004 (File No. 333-115137) and June 12, 2003 (File No. 333-106043), the contents of which are hereby incorporated by reference. These additional shares of common stock have become reserved for issuance as a result of the amendment and restatement of the Registrant's Employee Stock Purchase Plan effective as of May 18, 2018.

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") under the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act") are incorporated herein by reference:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 30, 2017 filed with the Commission on February 27, 2018, which contains the Registrant's audited financial statements for the latest 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 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 which is contained in the Registrant's Exchange Act Registration Statement on Form 8-A filed with the Commission on June 6, 2003 (Exchange Act File No. 000-50307), including any amendments or supplements thereto.

In addition, all documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to any filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of the filing of such documents; except as to any portion of any future annual or quarterly report to stockholders or document or current report furnished under current Items 2.02 or 7.01 of Form 8-K that is not deemed filed under such provisions.

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 other subsequently filed document which also is incorporated or 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 8. Exhibits.

Exhibit Number	Description
5.1	Opinion of Davis Polk & Wardwell LLP.
23.1	Consent of Davis Polk & Wardwell LLP (included in Exhibit 5.1).
23.2	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
24.1	Power of Attorney (included on the signature page of this Form S-8).
99.1	Employee Stock Purchase Plan (incorporated by reference to Appendix A to the Registrant's Proxy Statement filed with the Commission on April 3, 2018 (File No. 000-50307)).

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 30th day of July, 2018.

FORMFACTOR, INC.

By: /s/ Jason Cohen

Name: Jason Cohen

Title: General Counsel and Secretary

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Shai Shahar and Jason Cohen 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>
Principal Executive Officer:		
/s/ Michael D. Slessor Michael D. Slessor	Chief Executive Officer and Director (Principal Executive Officer)	July 30, 2018
Principal Financial Officer and Principal Accounting Officer:		
/s/ Shai Shahar Shai Shahar	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	July 30, 2018

<u>Signature</u>	<u>Title</u>	<u>Date</u>
Additional Directors:		
/s/ Lothar Maier Lothar Maier	Director	July 30, 2018
/s/ Edward Rogas, Jr Edward Rogas, Jr	Director	July 30, 2018
/s/ Kelley Steven-Waiss Kelley Steven-Waiss	Director	July 30, 2018
/s/ Michael W. Zellner Michael W. Zellner	Director	July 30, 2018
/s/ Richard DeLateur Richard DeLateur	Director	July 30, 2018
/s/ Thomas St. Dennis Thomas St. Dennis	Director	July 30, 2018
/s/ Raymond A. Link Raymond A. Link	Director	July 30, 2018

OPINION OF COUNSEL

[Davis Polk & Wardwell Letterhead]

July 30, 2018

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 3,000,000 shares (the "Shares") of its common stock, par value \$0.001 per share of the Company, issuable pursuant to its Employee Stock Purchase Plan (the "ESPP"), as described in the Registration Statement.

We, as your counsel, have examined originals or copies of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary or advisable for the purpose of rendering this opinion. In rendering the opinions expressed herein, we have, without independent inquiry or investigation, assumed that (i) all documents submitted to us as originals are authentic and complete, (ii) all documents submitted to us as copies conform to authentic, complete originals, (iii) all signatures on all documents that we reviewed are genuine, (iv) all natural persons executing documents had and have the legal capacity to do so, (v) all statements in certificates of public officials and officers of the Company that we reviewed were and are accurate and (vi) all representations made by the Company as to matters of fact in the documents that we reviewed were and are accurate.

On the basis of the foregoing, we are of the opinion that the Shares have been duly authorized and, when and to the extent issued pursuant to the ESPP upon receipt by the Company of the payment therefor, 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 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 Davis Polk & Wardwell LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors FormFactor, Inc.:

We consent to the use of our report dated February 27, 2018, with respect to the consolidated balance sheets of FormFactor, Inc. as of December 30, 2017 and December 31, 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 30, 2017, and the related notes, and the effectiveness of internal control over financial reporting as of December 30, 2017, incorporated herein by reference.

/s/ KPMG LLP

KPMG LLP Portland, Oregon July 30, 2018