### 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

## APPLIED MATERIALS, INC.

(Exact name of registrant as specified in its charter)

Delaware94-165526(State or other jurisdiction of<br/>incorporation or organization)(I.R.S. Employer<br/>Identification No.)

3050 Bowers Avenue, P.O. Box 58039, Santa Clara, California 95052-8039 (Address of Principal Executive Offices) (Zip Code)

APPLIED MATERIALS, INC. EMPLOYEES' STOCK PURCHASE PLAN (Full title of the plan)

Christina Y. Lai
Vice President, Corporate Legal Affairs, Corporate Secretary
Applied Materials, Inc.
3050 Bowers Avenue, P.O. Box 58039, Santa Clara, California 95052-8039
(Name and address of agent for service)

Telephone number, including area code, of agent for service: (408) 727-5555

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," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.						
Large accelerated filer	$\boxtimes$	Accelerated filer				
Non-accelerated filer		Smaller reporting company				
		Emerging growth company				
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.						

#### EXPLANATORY STATEMENT - DEREGISTRATION OF A PORTION OF SHARES

Effective as of October 28, 2019, Applied Materials, Inc. (the "Registrant") amended its Employees' Stock Purchase Plan (the "Plan") to decrease the number of shares of its common stock ("Shares") that is available for issuance under the Plan by 3,000,000 Shares. Accordingly, the purpose of this Post-Effective Amendment No. 4 to the Registrant's Registration Statement on Form S-8 (Commission File No. 333-143377), which was originally filed on May 30, 2007, amended by Post-Effective Amendment No. 1 thereto filed on July 27, 2009, amended by Post-Effective Amendment No. 2 thereto filed on February 23, 2010, and amended by Post-Effective Amendment No. 3 thereto filed on December 5, 2012 (the "Registration Statement"), is to reduce the number of Shares previously registered for issuance under the Plan pursuant to the Registration Statement (which number was 47,000,000) by 3,000,000 Shares that remain unsold. As a result, the Registration Statement now covers a maximum of 44,000,000 Shares.

Except to the extent specified above, the Registration Statement as previously filed is not amended or otherwise affected by this Post-Effective Amendment No. 4 thereto.

#### **EXHIBIT INDEX**

- 4.1 Applied Materials, Inc. Employees' Stock Purchase Plan, amended and restated effective October 28, 2019, incorporated by reference to Exhibit 10.12 to the Registrant's Form 10-K (file no. 000-06920) filed December 13, 2019.
- 24.1 Power of Attorney of Directors (included on the signature page hereto).

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, 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 Registration Statement on Form S-8 (Commission File No. 333-143377) to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Santa Clara, State of California on the 13th day of December, 2019.

By:	/s/ Gary E. Dickerson
-	Gary E. Dickerson
	President, Chief Executive Officer

APPLIED MATERIALS, INC.

#### POWER OF ATTORNEY

#### KNOW ALL PERSONS BY THESE PRESENTS:

Each of the undersigned directors and officers of Applied Materials, Inc., a Delaware corporation (the "Company"), hereby constitutes and appoints Gary E. Dickerson, Daniel J. Durn and Christina Y. Lai and each of them with power to act alone, his or her true and lawful attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to the Registration Statement on Form S-8 (Commission File No. 333-143377) together with all schedules and exhibits thereto, and to act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary or desirable to be done in and about the premises, as fully to all intents and purposes, as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

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Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 4 to Registration Statement on Form S-8 (Commission File No. 333-143377) has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ Gary E. Dickerson Gary E. Dickerson	President, Chief Executive Officer and Director (Principal Executive Officer)	December 13, 2019	
/s/ Daniel J. Durn <b>Daniel J. Durn</b>	Senior Vice President, Chief Financial Officer (Principal Financial Officer)	December 13, 2019	
/s/ Charles W. Read Charles W. Read	Corporate Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	December 13, 2019	

Signature	Title	Date
/s/ Thomas J. Iannotti Thomas J. Iannotti	Chairman of the Board	December 13, 2019
/s/ Judy Bruner Judy Bruner	Director	December 13, 2019
/s/ Xun Chen Xun Chen	Director	December 13, 2019
/s/ Aart J. de Geus Aart J. de Geus	Director	December 13, 2019
/s/ Stephen R. Forrest Stephen R. Forrest	Director	December 13, 2019
/s/ Alexander A. Karsner  Alexander A. Karsner	Director	December 13, 2019
/s/ Adrianna C. Ma <b>Adrianna C. Ma</b>	Director	December 13, 2019
/s/ Yvonne McGill  Yvonne McGill	Director	December 13, 2019
/s/ Scott A. McGregor Scott A. McGregor	Director	December 13, 2019
/s/ Dennis D. Powell  Dennis D. Powell	Director	December 13, 2019