UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
ANNUAL FILING

APPLIED MATERIALS, INC.
(NAME OF ISSUER)
COMMON STOCK
(TITLE OF CLASS OF SECURITIES)
038222105
(CUSIP NUMBER)
12/31/2017
(DATE OF EVENT WHICH REQUIRES FILING OF THIS STATEMENT)

CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE IS FILED:

(X) RULE 13D-1 (B) () RULE 13D-1 (C) () RULE 13D-1 (D)

\*THE REMAINDER OF THIS COVER PAGE SHALL BE FILLED OUT FOR A REPORTING PERSON`S INITIAL FILING ON THIS FORM WITH RESPECT TO THE SUBJECT CLASS OF SECURITIES, AND FOR ANY SUBSEQUENT AMENDMENT CONTAINING INFORMATION WHICH WOULD ALTER THE DISCLOSURES PROVIDED IN A PRIOR COVER PAGE.

THE INFORMATION REQUIRED IN THE REMAINDER OF THIS COVER PAGE SHALL NOT BE DEEMED TO BE "FILED" FOR THE PURPOSE OF SECTION 18 OF THE SECURITIES EXCHANGE ACT OF 1934 ("ACT") OR OTHERWISE SUBJECT TO THE LIABILITIES OF THAT SECTION OF THE ACT BUT SHALL BE SUBJECT TO ALL OTHER PROVISIONS OF THE ACT (HOWEVER, SEE THE NOTES).

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- NAME OF REPORTING PERSON: STATE STREET CORPORATION I.R.S. IDENTIFICATION NO. OF THE ABOVE PERSON: 04-2456637
- 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

NOT APPLICABLE

- 3. SEC USE ONLY
- 4. CITIZENSHIP OR PLACE OF ORGANIZATION

BOSTON, MASSACHUSETTS

- 5. SOLE VOTING POWER
  - 0 SHARES
- 6. SHARED VOTING POWER

49,249,823

- 7. SOLE DISPOSITIVE POWER
  - 0 SHARES
- 8. SHARED DISPOSITIVE POWER

55,652,309

9. AGGREGATED AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

55,652,309\*

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

NOT APPLICABLE

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 5.27%

12. TYPE OF REPORTING PERSON

HC

\*49,249,823 SHARES HELD IN VARIOUS CAPACITIES

6,402,486 SHARES AS INVESTMENT MANAGER FOR THE APPLIED MATERIALS INC. EMPLOYEE

SAVINGS AND RETIREMENT PLAN

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ITEM 1.

(A) NAME OF ISSUER

APPLIED MATERIALS, INC.

(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

3050 BOWERS AVE SANTA CLARA CA 95054-3299

ITEM 2.

(A) NAME OF PERSON FILING

STATE STREET CORPORATION AND ANY OTHER REPORTING PERSON IDENTIFIED ON THE SECOND PART OF THE COVER PAGES HERETO

(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IN NONE, RESIDENCE

STATE STREET FINANCIAL CENTER ONE LINCOLN STREET BOSTON, MA 02111 (FOR ALL REPORTING PERSONS)

- (C) CITIZENSHIP: SEE ITEM 4 (CITIZENSHIP OR PLACE OF ORGANIZATION) OF COVER PAGES
- (D) TITLE OF CLASS OF SECURITIES COMMON STOCK
- (E) CUSIP NUMBER:

038222105

ITEM 3.

IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A:
SEE ITEM 12(TYPE OF REPORTING PERSON) OF THE COVER PAGE
FOR EACH REPORTING PERSON AND THE TABLE BELOW, WHICH EXPLAINS
THE MEANING OF THE TWO LETTER SYMBOLS APPEARING IN ITEM 12 OF
THE COVER PAGES.

SYMBOL CATEGORY BANK AS DEFINED IN SECTION 3(A) (6) OF THE ACT. BK IC INSURANCE COMPANY AS DEFINED IN SECTION 3 (A) (19) OF THE ACT IC INVESTMENT COMPANY REGISTERED UNDER SECTION 8 OF THE INVESTMENT COMPANY ACT OF 1940. AN INVESTMENT ADVISOR IN ACCORDANCE WITH RULE IΑ 13D-1(B) (1) (II) (E). AN EMPLOYEE BENEFIT PLAN OR ENDOWMENT FUND IN FΡ ACCORDANCE WITH RULE 13D-1(B) (1) (II) (F) HC A PARENT HOLDING COMPANY OR CONTROL PERSON IN ACCORDANCE WITH RULE 13D-1(B)(1)(II) (G). A SAVINGS ASSOCIATIONS AS DEFINED IN SECTION 3(B) SA OF THE FEDERAL DEPOSIT INSURANCE ACT (12 U.S.C. 1813). CP A CHURCH PLAN THAT IS EXCLUDED FROM THE DEFINITION OF AN INVESTMENT COMPANY UNDER SECTION 3(C)(14) OF THE

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ITEM 4. OWNERSHIP

THE INFORMATION SET FORTH IN ROWS 5 THROUGH 11 OF THE COVER PAGE HERETO FOR EACH OF THE REPORTING PERSONS IS INCORPORATED HEREIN BY REFERENCE.

INVESTMENT COMPANY ACT OF 1940.

- ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF CLASS NOT APPLICABLE
- ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON NOT APPLICABLE
- ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON
  SEE EXHIBIT 1 ATTACHED HERETO
- ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMEBERS OF THE GROUP NOT APPLICABLE

ITEM 9. NOTICE OF DISSOLUTION OF GROUP NOT APPLICABLE

## ITEM 10. CERTIFICATION

BY SIGNING BELOW I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE SECURITIES REFERRED TO ABOVE WERE ACQUIRED AND ARE HELD IN THE ORDINARY COURSE OF BUSINESS AND WERE NOT ACQUIRED AND ARE NOT HELD FOR THE PURPOSE OR WITH THE EFFECT OF CHANGING OR INFLUENCING THE CONTROL OF THE ISSUER OF THE SECURITIES AND WERE NOT ACQUIRED AND ARE NOT HELD IN CONNECTION WITH OR AS A PARTICIPANT IN ANY TRANSACTION HAVING THAT PURPOSE OR EFFECT.

## **SIGNATURES**

CHIDCEDTADA

AFTER REASONABLE INQUIRY AND TO THE BEST OF HIS KNOWLEDGE AND BELIEF, EACH OF THE UNDERSIGNED CERTIFIES THAT THE INFORMATION SET FORTH IN THIS STATEMENT IS TRUE, COMPLETE AND CORRECT.

FEBRUARY 14, 2018 STATE STREET CORPORATION

/S/ ELIZABETH SCHAEFER SENIOR VICE PRESIDENT

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## EXHIBIT 1

THE FOLLOWING TABLE LISTS THE IDENTITY AND ITEM 3 CLASSIFICATION OF EACH SUBSIDIARY OF STATE STREET CORPORATION, THE PARENT HOLDING COMPANY, THAT BENEFICIALLY OWNS THE ISSUER'S SECURITIES. PLEASE REFER TO ITEM 3 OF THE ATTACHED SCHEDULE 13G FOR A DESCRIPTION OF EACH OF THE TWO-LETTER SYMBOLS REPRESENTING THE ITEM 3 CLASSIFICATION BELOW.

SUBSTITIANT	TIEM 3 CLASSIFICATION
STATE STREET BANK AND TRUST COMPANY	BK
SSGA FUNDS MANAGEMENT, INC.	IA
STATE STREET GLOBAL ADVISOR TRUST COMPANY	IA
STATE STREET GLOBAL ADVISORS (JAPAN) CO., LTD.	IA
STATE STREET GLOBAL ADVISORS ASIA LTD	IA
STATE STREET GLOBAL ADVISORS FRANCE S.A.S	IA
STATE STREET GLOBAL ADVISORS SINGAPORE LTD.	IA
STATE STREET GLOBAL ADVISORS LIMITED	IA
STATE STREET GLOBAL ADVISORS GmbH	IA
STATE STREET GLOBAL ADVISORS, AUSTRALIA	IA

TTEM 2 CLASSIETCATION

NOTE: ALL OF THE LEGAL ENTITIES ABOVE ARE DIRECT OR INDIRECT SUBSIDIARIES OF STATE STREET CORPORATION.

Information Classification: General

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