SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT Under the Securities Act of 1933



MAXIM INTEGRATED PRODUCTS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 77-00246 (I.R.S. Employer Identification No.)

120 San Gabriel Drive Sunnyvale, California 94086 (Address of Principal Executive Offices, including Zip Code)

1996 STOCK INCENTIVE PLAN, AS AMENDED AND RESTATED 2008 EMPLOYEE STOCK PURCHASE PLAN, AS AMENDED (Full title of the plan)

Mark Casper Associate General Counsel and Secretary Maxim Integrated Products, Inc. 120 San Gabriel Drive Sunnyvale, California 94086 (408) 737-7600 (Name, address, including zip code, and telephone number, including area code, of agent for service)

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 **[X]** Non-accelerated filer **[**] (Do not check if a smaller reporting company) Accelerated Filer [] Smaller reporting company []

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	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 1996 Stock Incentive Plan (1)	6,000,000 shares	\$17.72	\$106.320.000	\$7,580.62
Common Stock, \$0.001 par value, to be issued under	0,000,000 shares	φ17.7 <i>2</i>	\$100,520,000	\$7,580.02
the 2008 Employee Stock Purchase Plan (2)	2,000,000 shares	\$15.06	\$30,120,000	\$2,147.56

(1) The proposed maximum offering price per share has been estimated in accordance with Rule 457(h) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee for shares reserved for future issuance under the registrant's 1996 Stock Incentive, as Amended and Restated (the "1996 Plan"). The computation is based upon of the average of the high and low price of the registrant's Common Stock as reported on the Nasdaq Global Select Market on February 1, 2010.

(2) The proposed maximum offering price per share has been estimated in accordance with Rule 457(h) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee for shares reserved for future issuance under the registrant's 2008 Employee Stock Purchase Plan, as Amended (the "ESPP"). The computation is based upon 85% (see explanation in following sentence) of the average of the high and low price of the registrant's Common Stock as reported on the Nasdaq Global Select Market on February 1, 2010. Pursuant to the ESPP, which plan is incorporated by reference herein, the purchase price of a share of Common Stock means an amount equal to 85% of the Fair Market Value (as defined in the ESPP) of a share of Common Stock on the Offer Date (as defined in the ESPP) or the Purchase Date (as defined in the ESPP), whichever is lower.

MAXIM INTEGRATED PRODUCTS, INC. REGISTRATION STATEMENT ON FORM S-8

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been previously filed with the Securities and Exchange Commission ("SEC"), are hereby incorporated by reference in this Registration Statement on Form S-8 (this "Registration Statement"):

- (a) The registrant's Annual Report on Form 10-K for the fiscal year ended June 27, 2009, filed on August 26, 2009.
- (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") (other than information contained in Current Reports on Form 8-K that is deemed furnished and not filed), since the end of the fiscal year covered by the annual report referred to in (a) above, including the registrant's Quarterly Report on Form 10-Q for the first fiscal quarter of 2010 ended on September 26, 2009, filed on November 5, 2009.
- (c) The description of the registrant's Common Stock set forth in its registration statement on Form 8-A, filed on October 6, 2008.

All documents filed by the registrant with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the effectiveness of this Registration Statement and prior to the filing of a post-effective amendment 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 part hereof from the date of filing of such documents.

The documents incorporated by reference herein contain or will contain forward-looking statements that involve risks and uncertainties. The registrant's actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, the risks identified in the respective documents incorporated by reference.

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 General Corporation Law of Delaware (the "DGCL") provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation) by reason of the fact that any such person is or was a director, officer, employee or agent of such corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such officer or director acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A Delaware corporation may indemnify officers and directors against expenses (including attorneys' fees) in connection with the defense or settlement of any action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of an action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred.

Section 102 of the DGCL allows a Delaware corporation to eliminate or limit the personal liability of a director to the corporation or to any of its stockholders for monetary damage for a breach of fiduciary duty as a director, except in the case where the director (i) breaches such person's duty of loyalty to the corporation or its stockholders, (ii) fails to act in good faith, engages in intentional misconduct or knowingly violates a law, (iii) authorizes the payment of a dividend or approves a stock purchase or redemption in violation of Section 174 of the DGCL or (iv) obtains an improper personal benefit. In accordance with the DGCL, the Sixth Article of the registrant's certificate of incorporation provides that, to the fullest extent permitted by the DGCL as it may be amended, no director shall be personally liable to the registrant or its stockholders for monetary damages for breach of fiduciary duty as a director. As permitted by the DGCL, the registrant's bylaws provide that, under certain circumstances, directors and officers of the registrant shall be indemnified against expenses including attorneys' fees, judgments, fines and settlements actually and reasonably incurred in connection with any proceeding by reason of their status as such. The registrant has also entered into indemnification agreements with its directors and officers that provide, under certain circumstances, directors and officers of the registrant shall, by reason of their status as such, be indemnified against expenses including attorneys' fees, judgments, fines and settlements, fines and settlements, fines and settlements actually and reasonably incurred in connection with any proceeding by reason of their status as such, be indemnified against expenses including attorneys' fees, judgments, fines and settlements actually and reasonably incurred in connection with any proceeding.

See also the undertakings set forth in response to Item 9 hereof.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibits listed on the accompanying Index to Exhibits are filed as a part hereof, and incorporated by reference into, this Registration Statement. (See Index to Exhibits below).

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 any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of the securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(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 such information in the Registration Statement;

Provided, however, that paragraphs (A)(1)(i) and (A)(1)(i) do not apply if the information required to be included in a post-effective amendment by those paragraphs 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 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.

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 Section 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.

C. 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 foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC, 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.

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 Sunnyvale, State of California, on February 2, 2010.

MAXIM INTEGRATED PRODUCTS, INC.

By: /s/ Bruce E. Kiddoo

Bruce E. Kiddoo, Senior Vice President and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Tunc Doluca and Bruce E. Kiddoo, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this Registration Statement on Form S-8, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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.

SIGNATURE	TITLE	DATE	
/s/ Tunc Doluca	Director and President and Chief Executive Officer (Principal Executive Officer)	February 2, 2010	
Tunc Doluca	Onicer (Principal Executive Onicer)		
/s/ Bruce E. Kiddoo	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting	February 2, 2010	
Bruce E. Kiddoo	Officer)		
/s/ James R. Bergman	Director	February 2, 2010	
James R. Bergman			
/s/ Joseph R. Bronson	Director	February 2, 2010	
Joseph R. Bronson			
/s/ Robert E. Grady	Director	February 2, 2010	
Robert E. Grady			
/s/ B. Kipling Hagopian	Director and Chairman of the Board	February 2, 2010	
B. Kipling Hagopian			
/s/ William D. Watkins	Director	February 2, 2010	
William D. Watkins		•	
/s/ A.R. Frank Wazzan	Director	February 2, 2010	
A.R. Frank Wazzan			

INDEX TO EXHIBITS

Exhibit Number	Exhibit Document
5.1	Opinion of Weil Gotshal & Manges LLP
10.1	1996 Stock Incentive Plan, as Amended and Restated (1)
10.2	2008 Employee Stock Purchase Plan, as Amended (2)
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
23.2	Consent of Weil Gotshal & Manges LLP (contained in Exhibit 5.1 hereto)
24.1	Power of Attorney (see signature page)

- (1) Incorporated by reference from Appendix B to the registrant's Definitive Proxy Statement for its 2009 Annual Meeting of Stockholders held on December 10, 2009, filed on October 26, 2009.
- (2) Incorporated by reference from Appendix A to the registrant's Definitive Proxy Statement for its 2009 Annual Meeting of Stockholders held on December 10, 2009, filed on October 26, 2009.