SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C.  20549  

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

MICROCHIP TECHNOLOGY INCORPORATED  
(Exact Name of Registrant as Specified in Its Charter)  

Delaware  
(State of Incorporation)  

86-062904  
(I.R.S. Employer Identification No.)  

2355 W. Chandler Blvd., Chandler, AZ  85224  
(Address of Principal Executive Offices, Including Zip Code)  

MICROCHIP TECHNOLOGY INCORPORATED  
1997 Nonstatutory Stock Option Plan  
2001 Employee Stock Purchase Plan  
(Full Titles of the Plans)  

Steve Sanghi  
President and Chief Executive Officer  
MICROCHIP TECHNOLOGY INCORPORATED  
2355 W. Chandler Boulevard, Chandler, Arizona 85224  
(480)792-7200  
(Telephone Number, Including Area Code, of Agent for Service)  

This Registration Statement shall become effective immediately upon filing with the Securities and Exchange Commission, and sales of the registered securities begin as soon as reasonably practicable after such effective date.  

CALCULATION OF REGISTRATION FEE  

<table>
<thead>
<tr>
<th>Title of Securities to be Registered</th>
<th>Amount to be Registered</th>
<th>Proposed Maximum Offering Price Per Share</th>
<th>Proposed Maximum Aggregate Offering Price</th>
<th>Amount of Registration Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock, $.001 par value per share:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997 Nonstatutory Stock Option Plan</td>
<td>5,900,000 (^1)</td>
<td>$17.525 (^2)</td>
<td>$103,397,500 (^2)</td>
<td>$9,512.57</td>
</tr>
<tr>
<td>2001 Employee Stock Purchase Plan</td>
<td>500,000 (^1)</td>
<td>14.896 (^2)</td>
<td>7,448,000 (^2)</td>
<td>685.23</td>
</tr>
<tr>
<td>Total</td>
<td>6,400,000 (^1)</td>
<td>$110,845,500 (^2)</td>
<td></td>
<td>$10,197.80</td>
</tr>
</tbody>
</table>

1. This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the 1997 Nonstatutory Stock Option Plan and the 2001 Employee Stock Purchase Plan by reason of any stock dividend, stock split, recapitalization or any other similar transaction without receipt of consideration which results in an increase in the number of outstanding shares of Common Stock of Microchip Technology Incorporated. Associated with the Common Stock are common stock purchase rights which will not be exercisable or be evidenced separately from the Common Stock prior to the occurrence of certain events.  

2. Calculated solely for purposes of this offering under Rule 457(h) of the Securities Act of 1933, as amended, on the basis of 100% of the average of the high and low prices reported on the Nasdaq National Market System on September 13, 2002 (the “Market Price”) as to 5,900,000 shares and 85% of the Market Price as to 500,000 shares.
PART II

Information Required In The Registration Statement

Microchip Technology Incorporated (the “Registrant” or the “Company”) hereby incorporates by reference into this Registration Statement, pursuant to general Instruction “E” to Form S-8, the contents of the Registration Statement on Form S-8 (No. 333-67215) filed with the Securities Exchange Commission (the “SEC”) on November 13, 1998, the contents of Registration Statement on Form S-8 (No. 333-93571) filed with the SEC on December 23, 1999, the contents of Registration Statement on Form S-8 (No. 333-51322) filed with the SEC on December 6, 2000 and the contents of Registration Statement on Form S-8 (No. 333-73506) filed with the SEC on November 16, 2001.

Item 3. Incorporation of Documents By Reference.

There are hereby incorporated by reference in this Registration Statement the following documents and information heretofore filed by the Registrant with the SEC:

(5) The description of the Registrant’s Preferred Share Purchase Rights contained in the Registrant’s Registration Statement on Form 8-A filed on February 5, 1995, including any amendment or report updating such description.
(6) The description of the Registrant’s Common Stock contained in the Registrant’s Registration Statement on Form 8-A filed on February 5, 1993, including any amendment or report updating such description.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which de-registers all securities remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Item 8. Exhibits.

Exhibit No. Exhibit

5.1 Opinion and Consent of Mary K. Simmons, Esq.

10.1 1997 Stock Option Plan, as amended through August 16, 2002

10.2 Form of Notice of Grant For 1997 Nonstatutory Stock Option Plan, with Exhibit A thereto, Form of Stock Option Agreement [Incorporated by reference to Exhibit No. 10.17 to Registrant’s Annual Report on Form 10-K for the fiscal year ended March 31, 1998]

10.3 2001 Employee Stock Purchase Plan, as amended through August 16, 2002

10.4 Form of Enrollment Form For 2001 Employee Stock Purchase Plan [Incorporated by reference to Exhibit No. 10.1 to Registration Statement No. 333-73506]

10.5 Form of Change Form For 2001 Employee Stock Purchase Plan [Incorporated by reference to Exhibit No. 10.2 to Registration Statement No. 333-73506]

23.1 Consent of Independent Auditors -- Ernst & Young LLP
23.2 Consent of Independent Auditors -- KPMG LLP

23.3 Consent of Mary K. Simmons, Esq. is contained in Exhibit 5

24.1 Power of Attorney. Reference is made to Page II-3 of this Registration Statement
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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Chandler, State of Arizona, on September 17, 2002.

MICROCHIP TECHNOLOGY INCORPORATED

By: /s/ Steve Sanghi

Steve Sanghi
President, Chief Executive Officer and
Chairman of the Board

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Steve Sanghi and Mary K. Simmons, and each of them, his attorneys-in-fact, each with the power of substitution, for him and in his 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 sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto in all documents in connection therewith, with the SEC, granting unto said attorneys- in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ Steve Sanghi</td>
<td>Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)</td>
<td>September 17, 2002</td>
</tr>
<tr>
<td>/s/ Gordon W. Parnell</td>
<td>Vice President, Chief Financial Officer (Principal Financial and Accounting Officer)</td>
<td>September 17, 2002</td>
</tr>
<tr>
<td>/s/ Matthew W. Chapman</td>
<td>Director</td>
<td>September 17, 2002</td>
</tr>
<tr>
<td>/s/ Albert J. Hugo-Martinez</td>
<td>Director</td>
<td>September 17, 2002</td>
</tr>
<tr>
<td>/s/ L.B. Day</td>
<td>Director</td>
<td>September 17, 2002</td>
</tr>
<tr>
<td>/s/ Wade F. Meyercord</td>
<td>Director</td>
<td>September 17, 2002</td>
</tr>
</tbody>
</table>
## EXHIBIT INDEX

<table>
<thead>
<tr>
<th>EXHIBIT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Opinion and Consent of Mary K. Simmons, Esq.</td>
</tr>
<tr>
<td>10.1</td>
<td>1997 Stock Option Plan, as amended through August 16, 2002</td>
</tr>
<tr>
<td>10.2</td>
<td>Form of Notice of Grant For 1997 Nonstatutory Stock Option Plan, with Exhibit A thereto, Form of Stock Option Agreement [Incorporated by reference to Exhibit No. 10.17 to Registrant’s Annual Report on Form 10-K for the fiscal year ended March 31, 1998]</td>
</tr>
<tr>
<td>10.3</td>
<td>2001 Employee Stock Purchase Plan, as amended through August 16, 2002</td>
</tr>
<tr>
<td>10.4</td>
<td>Form of Enrollment Form For 2001 Employee Stock Purchase Plan [Incorporated by reference to Exhibit No. 10.1 to Registration Statement No. 333-73506]</td>
</tr>
<tr>
<td>10.5</td>
<td>Form of Change Form For 2001 Employee Stock Purchase Plan [Incorporated by reference to Exhibit No. 10.2 to Registration Statement No. 333-73506]</td>
</tr>
<tr>
<td>23.1</td>
<td>Consent of Independent Auditors -- Ernst &amp; Young LLP</td>
</tr>
<tr>
<td>23.2</td>
<td>Consent of Independent Auditors -- KPMG LLP</td>
</tr>
<tr>
<td>23.3</td>
<td>Consent of Mary K. Simmons, Esq. is contained in Exhibit 5</td>
</tr>
<tr>
<td>24.1</td>
<td>Power of Attorney. Reference is made to Page II-3 of this Registration Statement</td>
</tr>
</tbody>
</table>
EXHIBIT 5.1

OPINION AND CONSENT OF
MARY K. SIMMONS, ESQ.
September 13, 2002

Microchip Technology Incorporated
2355 West Chandler Boulevard
Chandler, AZ  85224

Re:   Registration Statement on Form S-8 For Issuance of Common Stock Under the
      Microchip Technology Incorporated 1997 Nonstatutory Stock Option Plan and
      the 2001 Employee Stock Purchase Plan (“ESPP”)

Gentlemen:

I refer you to your registration on Form S-8 (the “Registration Statement”) under the Securities Act of 1933, as amended, of 5,900,000 shares of Common Stock under the 1997 Nonstatutory Stock Option Plan and of 500,000 shares of Common Stock under the ESPP.  I advise you that, in my opinion, when such shares have been issued and sold pursuant to the applicable provisions of the plans, and in accordance with the Registration Statement, such shares will be validly issued, fully-paid and non-assessable shares of the Company’s Common Stock, par value $.001 per share.

I hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely yours,

/s/ Mary K. Simmons

Mary K. Simmons
General Counsel
Microchip Technology Incorporated
EXHIBIT 10.1

1997 STOCK OPTION PLAN
AS AMENDED THROUGH AUGUST 16, 2002
EXHIBIT 10.3

2001 EMPLOYEE STOCK OPTION PLAN
AS AMENDED THROUGH AUGUST 16, 2002
EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP
CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the Microchip Technology Incorporated 1997 Nonstatutory Stock Option Plan and the 2001 Employee Stock Purchase Plan of our report dated April 24, 2002, except for Note 21 as to which the date is May 22, 2002, with respect to the consolidated financial statements and schedule of Microchip Technology Incorporated included in its Annual Report on Form 10-K for the year ended March 31, 2002, filed with the Securities Exchange Commission.

/s/ ERNST & YOUNG LLP

Phoenix, Arizona
September 12, 2002
EXHIBIT 23.2

CONSENT OF KPMG LLP
INDEPENDENT AUDITORS’ CONSENT

The Board of Directors
Microchip Technology Incorporated:

We consent to the incorporation by reference in the registration statement on Form S-8 of Microchip Technology Incorporated pertaining to the 1997 Nonstatutory Stock Option Plan and 2001 Employee Stock Purchase Plan of our report dated April 30, 2001, with respect to the consolidated balance sheet of Microchip Technology Incorporated as of March 31, 2001 and the related consolidated statements of income, stockholders’ equity, cash flows and comprehensive income for each of the years in the two-year period ended March 31, 2001.

/s/ KPMG LLP

Phoenix, Arizona
September 12, 2002
EXHIBIT 23.3

CONSENT OF COUNSEL
(contained in Exhibit 5.1)
EXHIBIT 24.1

POWER OF ATTORNEY

(Reference is made to Page II-3 of this Registration Statement)