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  
Microchip Technology Incorporated 2001 Employee Stock Purchase Plan  
(Full Title of the Plan)

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>1,300,000(^1)</td>
<td>$29.93(^2)</td>
<td>$38,912,022.50(^2)</td>
<td>$8,979.00(^3)</td>
</tr>
</tbody>
</table>

1. This Registration Statement shall also cover any additional shares of Common Stock which become issuable under the Microchip Technology Inc. 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(b) of the Securities Act of 1933, as amended, on the basis of 85% of the average of the high and low prices reported on the Nasdaq National Market System on November 12, 2001.

3. As permitted pursuant to the amendments to Rule 457 set forth in Securities and Exchange Commission Release No. 33-7943 (effective March 7, 2001), the Registration Fee is payable only on 1,200,000 shares, as up to 100,000
shares have been previously registered on earlier Forms S-8 less than five years old for the Microchip Technology Inc. Employee Stock Purchase Plan which will terminate following the purchase which will occur on the last business day of February 2002. Should any shares remain in the Microchip Technology Inc. Employee Stock Purchase Plan following such purchase, up to 100,000 shares will be rolled over to the Microchip Technology Inc. 2001 Employee Stock Purchase Plan, as approved by the Board of Directors and stockholders. Should less than 100,000 shares be rolled over into the Microchip Technology Inc. 2001 Employee Stock Purchase Plan, the Registrant will de-register the difference between 100,000 shares and the number of shares actually rolled over.
PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation Of Documents By Reference.

Microchip Technology Incorporated (the "Registrant" or the "Company") hereby incorporates by reference in this registration statement the following documents previously filed with the Securities and Exchange Commission (the "Commission"): 


(e) The description of the Registrant’s Preferred Share Purchase Rights contained in the Registrant’s Registration Statement on Form 8-A filed on February 14, 1995, including any amendment or report updating such description.

(f) 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 4. Description Of Securities.

Not applicable.

Item 5. Interests Of Named Experts And Counsel.

As to named experts, Item 5 is inapplicable. Mary K. Simmons, who is General Counsel and Secretary of the Company, owns shares of Common Stock and holds options to purchase shares covering significantly less than one percent (1%) of the outstanding shares of the outstanding Common Stock, $.001 par value per share, of the Company.

Item 6. Indemnification Of Directors And Officers.

Section 145 of the Delaware General Corporation Law ("Delaware Law") authorizes a court to award or a corporation’s Board of Directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act"). Article VI of the Registrant's By-Laws provides for mandatory indemnification of its directors and executive officers, to the maximum extent permitted by Delaware Law. Article VI of the Registrant’s By-Laws also provides for permissive indemnification of the Registrant’s employees and agents to the extent, and in the manner, permitted by Delaware Law. The Registrant has entered into indemnification agreements with its directors and selected officers, a form of which was filed as Exhibit 10.1 to Registration Statement No. 33-57960. The indemnification agreements provide the Registrant’s directors and selected officers with further indemnification to the maximum extent permitted by Delaware Law.
Item 7. **Exemption From Registration Claimed.**

Not applicable.

Item 8. **Exhibits.**

4.1 Microchip Technology Incorporated 2001 Employee Stock Purchase Plan [Incorporated by Reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2001]

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

10.1 Form of Enrollment Form for the Microchip Technology Inc. 2001 Employee Stock Purchase Plan

10.2 Form of Change Form for the Microchip Technology Inc. 2001 Employee Stock Purchase Plan

23.1 Consent of KPMG LLP

23.2 Consent of Counsel (contained in Exhibit 5.1)

24.1 Power of Attorney (Reference is made to Page II-4 of this Registration Statement)

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;

   (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; and

   (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.

(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 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.
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 Commission 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, 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 November 15, 2001.

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 on the date indicated 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>November 15, 2001</td>
</tr>
<tr>
<td></td>
<td>Vice President, Chief Financial Officer (Principal Financial and Accounting Officer)</td>
<td>November 15, 2001</td>
</tr>
<tr>
<td>/s/ Gordon W. Parnell</td>
<td>Director</td>
<td>November 15, 2001</td>
</tr>
<tr>
<td>/s/ Matthew W. Chapman</td>
<td></td>
<td>November 15, 2001</td>
</tr>
<tr>
<td>/s/ Albert J. Hugo-Martinez</td>
<td></td>
<td>November 15, 2001</td>
</tr>
<tr>
<td>/s/ L.B. Day</td>
<td>Director</td>
<td>November 15, 2001</td>
</tr>
<tr>
<td>/s/ Wade F. Meyercord</td>
<td>Director</td>
<td>November 15, 2001</td>
</tr>
</tbody>
</table>
EXHIBIT INDEX

4.1  Microchip Technology Incorporated 2001 Employee Stock Purchase Plan [Incorporated by Reference to Exhibit 10.1 to Registrant’s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2001]

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

10.1 Form of Enrollment Form for the Microchip Technology Inc. 2001 Employee Stock Purchase Plan

10.2 Form of Change Form for the Microchip Technology Inc. 2001 Employee Stock Purchase Plan

23.1 Consent of KPMG LLP

23.2 Consent of Counsel (contained in Exhibit 5.1)

24.1 Power of Attorney (Reference is made to Page II-4 of this Registration Statement)
EXHIBIT 5.1

OPINION AND CONSENT OF MARY K. SIMMONS, ESQ.
November 15, 2001

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 2001 Employee Stock Purchase Plan (the "Plan")

Gentlemen:

I refer you to your registration on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended, of 1,300,000 shares of Common Stock under the Plan. I advise you that, in my opinion, when such shares have been issued and sold pursuant to the applicable provisions of the Plan, 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  
Vice President, General Counsel  
Microchip Technology Incorporated
EXHIBIT 10.1

FORM OF ENROLLMENT FORM FOR THE MICROCHIP TECHNOLOGY INC. 2001 EMPLOYEE STOCK PURCHASE PLAN
EXHIBIT A
MICROCHIP TECHNOLOGY INCORPORATED
Employee Stock Purchase Plan
Enrollment Form

Please print and complete all information below:

Full name: ___________________________ Badge #: ___________
Last First M

Home Address: _______________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Social Security Number: ___________ Date of Hire: ___________


SECTION I - ELECTION

Choose One:
☐ I hereby decline to participate in the Employee Stock Purchase Plan for this semi-annual participation period.
☐ I hereby authorize Microchip Technology Inc. to deduct the following amount from my salary each pay period (gross salary).

CIRCLE ONE: 1%  2%  3%  4%  5%  6%  7%  8%  9%  10%

SECTION II – BENEFICIARY (for payroll deducted, cash balance of contributions prior to a purchase)
I understand that if I am married, my spouse shall automatically be my designated beneficiary unless I elect otherwise and my spouse consents to such election. When more than one beneficiary is designated, if the percentage is not specified, payment will be made in equal dollars to each surviving beneficiary, or all to the last surviving beneficiary.

Primary Beneficiary
I hereby designate the following person(s) as primary beneficiary of my payroll deduction account under the Plan payable by reason of my death.

Name ___________________________ Relationship of Beneficiary ___________________________ Percentage ___________

____________________________________________________________________

Contingent Beneficiary
In the event that there is no living primary beneficiary at my death, I hereby designate the following person(s) as contingent beneficiary of my payroll deduction account.

Name ___________________________ Relationship of Beneficiary ___________________________ Percentage ___________

____________________________________________________________________
***Two-Sided Document***

**SECTION III- CONSENT OF SPOUSE**

Note: If your spouse is not your Designated Primary Beneficiary, then this Designation of beneficiary is invalid without the consent of your spouse unless your spouse waived the right to consent to any change in the beneficiary designation under a prior beneficiary designation.

I acknowledge that I am the spouse of the Participant named on the reverse side of this form. I hereby certify that I have read this Designation of Beneficiary Form and understand that I possess a beneficial interest in my spouse's payroll deduction account under the Plan if I survive him/her. I hereby acknowledge and consent to the Designation of Beneficiary on the reverse side of this form. My consent shall be irrevocable unless my spouse subsequently changes the designation of beneficiary.

If my spouse changes the designation, (Choose A or B):

- [ ] (A) I understand I must sign a new consent to the new designation for it to be effective.
- [ ] (B) I waive my right to consent to any future change in designation. I understand I have the right to restrict my consent only to the beneficiary designated on the reverse side of this form by checking box (A.)

I have executed this consent this __________ day of __________________, 20__.

__________________________________________
Signature of Participant's Spouse
EXHIBIT 10.2

FORM OF CHANGE FORM FOR THE MICROCHIP TECHNOLOGY INC.
2001 EMPLOYEE STOCK PURCHASE PLAN
EXHIBIT B
MICROCHIP TECHNOLOGY INCORPORATED
Employee Stock Purchase Plan (ESPP)
Change Form

Please print and complete all information below:

Full name: ___________________________ Badge #: ____________

Last First M

Home Address: ________________________________________________

______________________________________________________________

______________________________________________________________

Social Security Number: __________________________ Date of Hire: ____________

SECTION I – CHANGE PAYROLL DEDUCTION PERCENTAGE

☐ I hereby authorize Microchip Technology Incorporated to change my current deduction percentage to the following:

CIRCLE ONE: 1% 2% 3% 4% 5% 6% 7% 8% 9% 10%

SECTION II – CHANGE BENEFICIARY (for payroll deducted, cash balance of contributions prior to a purchase)
I understand that if I am married, my spouse shall automatically be my designated beneficiary unless I elect otherwise and my spouse consents to such election. When more than one beneficiary is designated, if the percentage is not specified, payment will be made in equal dollars to each surviving beneficiary, or all to the last surviving beneficiary.

Primary Beneficiary
I hereby designate the following person(s) as primary beneficiary of my payroll deduction account under the Plan payable by reason of my death.

<table>
<thead>
<tr>
<th>Name</th>
<th>Relationship of Beneficiary</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contingent Beneficiary
In the event that there is no living primary beneficiary at my death, I hereby designate the following person(s) as contingent beneficiary of my payroll deduction account.

<table>
<thead>
<tr>
<th>Name</th>
<th>Relationship of Beneficiary</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION III – WITHDRAWAL FROM THE EMPLOYEE STOCK PURCHASE PLAN

Stop my contributions (select one):

☐ purchase Microchip Technology Inc. shares on the next purchase date.*
☐ refund my Employee Stock Purchase Plan payroll deductions collected.*
SECTION III- CONSENT OF SPOUSE

Note: If your spouse is not your Designated Primary Beneficiary, then this Designation of beneficiary is invalid without the consent of your spouse unless your spouse waived the right to consent to any change in the beneficiary designation under a prior beneficiary designation.

I acknowledge that I am the spouse of the Participant named on the reverse side of this form. I hereby certify that I have read this Designation of Beneficiary Form and understand that I possess a beneficial interest in my spouse's payroll deduction account under the Plan if I survive him/her. I hereby acknowledge and consent to the Designation of Beneficiary on the reverse side of this form. My consent shall be irrevocable unless my spouse subsequently changes the designation of beneficiary.

If my spouse changes the designation, (Choose A or B):

☐ (A) I understand I must sign a new consent to the new designation for it to be effective.

☐ (B) I waive my right to consent to any future change in designation. I understand I have the right to restrict my consent only to the beneficiary designated on the reverse side of this form by checking box (A.)

I have executed this consent this ____________ day of ______________________, 20__.

________________________________________
Signature of Participant's Spouse
EXHIBIT 23.1

CONSENT OF KPMG LLP
The Board of Directors
Microchip Technology Incorporated:

We consent to incorporation by reference in the registration statement on Form S-8 of Microchip Technology Incorporated of our report dated April 30, 2001, relating to the consolidated balance sheets of Microchip Technology Incorporated and subsidiaries as of March 31, 2001, and 2000, and the related consolidated statements of income, stockholders' equity, and cash flows for each of the years in the three-year period ended March 31, 2001, which report appears in the March 31, 2001 annual report on Form 10-K of Microchip Technology Incorporated.

KPMG LLP

Phoenix, Arizona
November 15, 2001
EXHIBIT 23.2

CONSENT OF COUNSEL
(contained in Exhibit 5.1)
EXHIBIT 24.1

POWER OF ATTORNEY

(Reference is made to Page II-4 of this Registration Statement)