FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB Number: 3235-0287 Estimated average burden 0.5 hours per response:

| Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b). | |
|---|--|
| Name and Address of Reporting Person* | |

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address | 1 0 | | 2. Issuer Name and Ticker or Trading Symbol <u>MICROCHIP TECHNOLOGY INC</u> [MCHP] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | |
|-------------------------|---------------|-------------|--|--|-------------------------------|-----------------------|--|--|
| SANGHI STE | <u>VE</u> | | [[| X | Director | 10% Owner | | |
| (Last) (First) (Middle) | | | | X | Officer (give title below) | Other (specify below) | | |
| C/O MICROCHIE | TECHNOLOGY I | NCORPORATED | 3. Date of Earliest Transaction (Month/Day/Year) 02/01/2010 | | President, CEO, Chairman | | | |
| 2355 WEST CHA | NDLER BOULEVA | ARD | | | | | | |
| (Street) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indivi | dual or Joint/Group Filing (C | heck Applicable Line) | | |
| CHANDLER | AZ | 85224-6199 | | X | Form filed by One Reporti | ng Person | | |
| | | | | | Form filed by More than O | ne Reporting Person | | |
| (City) | (State) | (Zip) | | | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---------------------------------|--|---|---|---|--|---------------|---------|--|---|---|--|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (mstr. 4) | |
| Common Stock | 02/01/2010 | | М | | 7,250 | A | \$26.51 | 4,349,938 ⁽¹⁾ | I | Shares held Directly and Indirectly, by Trust. | |
| Common Stock | 02/01/2010 | | М | | 107 | A | \$26.51 | 4,350,045 ⁽²⁾ | I | Shares held Directly and Indirectly, by Trust. | |
| Common Stock | 02/01/2010 | | М | | 2,775 | A | \$26.51 | 4,352,820 ⁽³⁾ | I | Shares held Directly and Indirectly, by Trust. | |
| Common Stock | 02/01/2010 | | М | | 6,550 | A | \$26.51 | 4,359,370 ⁽⁴⁾ | I | Shares held Directly and Indirectly, by Trust. | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transac Code (Ir 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | Derivative | 9. Number of derivative Securities Beneficially Owned Following Reported | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|---|--|---|---------------------------------|---|--|-------|--|--------------------|--|----------------------------------|-------------------|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | Transaction(s) (Instr. 4) | | |
| Restricted Stock Units | \$26.51 | 02/01/2010 | | М | | | 7,250 | (5) | (5) | Common Stock | 58,000 | \$ <mark>0</mark> | 0 | D | |
| Restricted Stock Units | \$26.51 | 02/01/2010 | | М | | | 107 | (6) | (6) | Common Stock | 214 | \$ <mark>0</mark> | 0 | D | |
| Restricted Stock Units | \$26.51 | 02/01/2010 | | М | | | 2,775 | (7) | (7) | Common Stock | 22,200 | \$ <mark>0</mark> | 19,425 | D | |
| Restricted Stock Units | \$26.51 | 02/01/2010 | | М | | | 6,550 | (8) | (8) | Common Stock | 6,550 | \$ <mark>0</mark> | 0 | D | |

Explanation of Responses:

1. Of the 4,349,938 shares held, 45,554 shares were held Directly; 4,304,384 shares were held by Trust. 2. Of the 4,350,045 shares held, 45,554 shares were held Directly; 4,304,491 shares were held by Trust. 3. Of the 4,352,820 shares held, 45,554 shares were held Directly; 4,307,266 shares were held by Trust. OMB APPROVAL

4. Of the 4,359,370 shares held, 45,554 shares were held Directly; 4,313,816 shares were held by Trust.

5. The restricted stock units vest in eight equal quarterly installments beginning May 1, 2008. Vested shares will be delivered to the reporting person upon vest.

6. The restricted stock units will vest 50% on November 1, 2009 and 50% on February 1, 2010 as long as the individual remains a service provider through the vesting date and the Company achieves performance targets for operating income in the six month period ending September 30, 2008.

7. The restricted stock units vest in eight equal quarterly installments beginning February 1, 2010, as long as the individual remains a service provider through the vesting date and the Company achieves performance targets for operating profit in the quarter ending June 30, 2009. Vested shares will be delivered to the reporting person upon vest.

8. The restricted stock units will vest in full on February 1, 2010 as long as the individual remains a service provider through the vesting date and the Company achieves performance targets for operating profit in the quarter ended June 30, 2009. Vested shares will be delivered to the reporting person upon vest.

Remarks:

Deborah L. Wussler, as Attorneyin-Fact

** Signature of Reporting Person

Date

02/02/2010

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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