FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVA
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# STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

			2. Issuer Name and Ticker or Trading Symbol MICROCHIP TECHNOLOGY INC [ MCHP ]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
			[ mem ]	X	Director	10% Owner			
(Last) (First) (Middle)		(Middle)		X	Officer (give title below)	Other (specify below)			
C/O MICROCHID TECHNIOLOGY DICORDOD ATED			3. Date of Earliest Transaction (Month/Day/Year) 03/01/2010		President, CEO, Chairman				
(Street) CHANDLER	AZ	85224-6199	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indivi	dual or Joint/Group Filing (Ch- Form filed by One Reporting Form filed by More than On	g Person			
(City)	(State)	(Zip)			, , , , , , , , , , , , , , , , , , , ,	gg.			

### 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 Transaction(s)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership
			Code	v	Amount	(A) or (D)	Price	(Instr. 3 and 4)		(Instr. 4)
Common Stock	03/01/2010		A		1,400 <sup>(1)</sup>	A	\$15.181	4,608,270 <sup>(2)</sup>	I	Shares held Directly and Indirectly by Trust <sup>(2)</sup>

# 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)	Transaction Code (Instr.		Derivative		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		Derivative	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)			

#### **Explanation of Responses:**

2. Of the 4,608,270 shares held, 45,554 shares were held Directly; 4,562,716 shares were held by Trust.

### Remarks:

<u>Deborah L. Wussler, as Attorney-in-Fact</u>

\*\* Signature of Reporting Person

03/03/2010

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

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

<sup>1.</sup> Shares were acquired under the Microchip Technology Incorporated 2001 Employee Stock Purchase Plan on March 1, 2010, in an exempt transaction pursuant to Rule 16(b)-3(d), paid for by contributions made during the six month period ended February 26, 2010.

 $<sup>^{\</sup>star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

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