

FORM 4**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVAL

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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

1. Name and Address of Reporting Person* <u>MOORTHY GANESH</u> (Last) (First) (Middle) <u>C/O MICROCHIP TECHNOLOGY INCORPORATED</u> <u>2355 WEST CHANDLER BOULEVARD</u> (Street) <u>CHANDLER</u> <u>AZ</u> <u>85224-6199</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MICROCHIP TECHNOLOGY INC [MCHP]</u> 3. Date of Earliest Transaction (Month/Day/Year) <u>05/01/2010</u> 4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title below) Other (specify below) <u>Exec. VP & COO</u> 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person
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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) (Instr. 3 and 4)	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			
Common Stock	05/03/2010		M		1,500	A	\$29.67	37,584 ⁽¹⁾	I	Shares held Directly and Indirectly, by Trust ⁽¹⁾
Common Stock	05/03/2010		F		489	D	\$29.67	37,095 ⁽²⁾	I	Shares held Directly and Indirectly, by Trust ⁽²⁾
Common Stock	05/01/2010		M		4,250	A	\$29.67	41,345 ⁽³⁾	I	Shares held Directly and Indirectly, by Trust ⁽³⁾
Common Stock	05/01/2010		F		1,385	D	\$29.67	39,960 ⁽⁴⁾	I	Shares held Directly and Indirectly, by Trust ⁽⁴⁾

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. Transaction Code (Instr. 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)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Restricted Stock Units	\$29.67	05/03/2010		M		1,500	(5)	(5)	Common Stock	12,000	\$0	9,000	D	
Restricted Stock Units	\$29.67	05/01/2010		M		4,250	(6)	(6)	Common Stock	17,000	\$0	12,750	D	

Explanation of Responses:

- Of the 37,584 shares held, 9,810 shares were held Directly; 27,774 shares were held by Trust.
- Of the 37,095 shares held, 9,321 shares were held Directly; 27,774 shares were held by Trust.
- Of the 41,345 shares held, 13,571 shares were held Directly; 27,774 shares were held by Trust.
- Of the 39,960 shares held, 12,186 shares were held Directly; 27,774 shares were held by Trust.
- 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.
- The restricted stock units vest in four equal quarterly installments beginning May 1, 2010. Vested shares will be delivered to the reporting person upon vest.

Remarks:

Deborah L. Wussler as Attorney-
in-Fact 05/04/2010

** Signature of Reporting Person

Date

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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