

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>01/31/2011</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 <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Exec. VP & COO</u> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> 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	01/31/2011		M		4,700	A	\$23.7	52,833 ⁽¹⁾	I	Shares held Directly and Indirectly, by Trust. ⁽¹⁾
Common Stock	01/31/2011		S		4,700	D	\$37	48,133 ⁽²⁾	I	Shares held Directly and Indirectly, by Trust. ⁽²⁾
Common Stock	02/01/2011		M		8,300	A	\$23.7	56,433 ⁽³⁾	I	Shares held Directly and Indirectly, by Trust. ⁽³⁾
Common Stock	02/01/2011		S		8,300	D	\$37.019	48,133 ⁽²⁾	I	Shares held Directly and Indirectly, by Trust. ⁽²⁾
Common Stock	02/01/2011		M		4,250	A	\$37.19	52,383 ⁽⁴⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁴⁾
Common Stock	02/01/2011		F		1,278	D	\$37.19	51,105 ⁽⁵⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁵⁾
Common Stock	02/01/2011		M		2,000	A	\$37.19	53,105 ⁽⁶⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁶⁾

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	02/01/2011		F		601	D	\$37.19	52,504 ⁽⁷⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁷⁾
Common Stock	02/01/2011		M		1,500	A	\$37.19	54,004 ⁽⁸⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁸⁾
Common Stock	02/01/2011		F		451	D	\$37.19	53,553 ⁽⁹⁾	I	Shares held Directly and Indirectly, by Trust. ⁽⁹⁾

**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	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Common Stock Option (Right to Buy)	\$23.7	01/31/2011		M			4,700	12/03/2002	12/03/2011	Common Stock	72,000	\$0	47,300	D	
Common Stock Option (Right to Buy)	\$23.7	02/01/2011		M			8,300	12/03/2002	12/03/2011	Common Stock	72,000	\$0	39,000	D	
Restricted Stock Units	\$37.19	02/01/2011		M			4,250	(10)	(10)	Common Stock	17,000	\$0	0	D	
Restricted Stock Units	\$37.19	02/01/2011		M			2,000	(11)	(11)	Common Stock	2,000	\$0	0	D	
Restricted Stock Units	\$37.19	02/01/2011		M			1,500	(12)	(12)	Common Stock	12,000	\$0	4,500	D	

Explanation of Responses:

- Of the 52,833 shares held, 12,186 shares were held Directly; 40,647 shares were held by Trust.
- Of the 48,133 shares held, 12,186 shares were held Directly; 35,947 shares were held by Trust.
- Of the 56,433 shares held, 12,186 shares were held Directly; 44,247 shares were held by Trust.
- Of the 52,383 shares held, 12,186 shares were held Directly; 40,197 shares were held by Trust.
- Of the 51,105 shares held, 12,186 shares were held Directly; 38,919 shares were held by Trust.
- Of the 53,105 shares held, 12,186 shares were held Directly; 40,919 shares were held by Trust.
- Of the 52,504 shares held, 12,186 shares were held Directly; 40,318 shares were held by Trust.
- Of the 54,004 shares held, 12,186 shares were held Directly; 41,818 shares were held by Trust.
- Of the 53,553 shares held, 12,186 shares were held Directly; 41,367 shares were held by Trust.
- 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.
- The restricted stock units will vest in full on February 1, 2011 as long as the individual remains a service provider through the vesting date. Vested shares will be delivered to the reporting person upon vest.
- 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. Vested shares will be delivered to the reporting person upon vest.

Remarks:

Deborah L. Wussler, as Attorney-in-Fact 02/02/2011
Date

** Signature of Reporting Person

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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