

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>			2. Issuer Name and Ticker or Trading Symbol <u>MICROCHIP TECHNOLOGY INC [ MCHP ]</u>			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 &amp; COO</u>		
(Last) (First) (Middle) <u>C/O MICROCHIP TECHNOLOGY INCORPORATED</u> <u>2355 WEST CHANDLER BOULEVARD</u>			3. Date of Earliest Transaction (Month/Day/Year) <u>11/01/2010</u>					
(Street) <u>CHANDLER</u> <u>AZ</u> <u>85224-6199</u>			4. If Amendment, Date of Original Filed (Month/Day/Year)			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		
(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 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	11/01/2010		M		4,250	A	\$32.05	48,362 <sup>(1)</sup>	I	Shares held Directly and Indirectly, by Trust. <sup>(1)</sup>
Common Stock	11/01/2010		F		1,278	D	\$32.05	47,084 <sup>(2)</sup>	I	Shares held Directly and Indirectly, by Trust. <sup>(2)</sup>
Common Stock	11/01/2010		M		1,500	A	\$32.05	48,584 <sup>(3)</sup>	I	Shares held Directly and Indirectly, by Trust. <sup>(3)</sup>
Common Stock	11/01/2010		F		451	D	\$32.05	48,133 <sup>(4)</sup>	I	Shares held Directly and Indirectly, by Trust. <sup>(4)</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)	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				
Restricted Stock Units	\$32.05	11/01/2010		M			4,250	(5)	(5)	Common Stock	17,000	\$0	4,250	D	
Restricted Stock Units	\$32.05	11/01/2010		M			1,500	(6)	(6)	Common Stock	12,000	\$0	6,000	D	

Explanation of Responses:

1. Of the 48,362 shares held, 12,186 shares were held Directly; 36,176 shares were held by Trust.
2. Of the 47,084 shares held, 12,186 shares were held Directly; 34,898 shares were held by Trust.
3. Of the 48,584 shares held, 12,186 shares were held Directly; 36,398 shares were held by Trust.
4. Of the 48,133 shares held, 12,186 shares were held Directly; 35,947 shares were held by Trust.
5. 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.
6. 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

11/03/2010

\*\* 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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