

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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>Bjornholt James Eric</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>02/01/2010</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>VP and CFO</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	02/01/2010		M		165	A	\$26.51	6,998	D	
Common Stock	02/01/2010		F		63	D	\$26.51	6,935	D	
Common Stock	02/01/2010		M		32	A	\$26.51	6,967	D	
Common Stock	02/01/2010		F		13	D	\$26.51	6,954	D	
Common Stock	02/01/2010		M		76	A	\$26.51	7,030	D	
Common Stock	02/01/2010		F		29	D	\$26.51	7,001	D	
Common Stock	02/01/2010		M		77	A	\$26.51	7,078	D	
Common Stock	02/01/2010		F		30	D	\$26.51	7,048	D	
Common Stock	02/01/2010		M		3,000	A	\$26.51	10,048	D	
Common Stock	02/01/2010		F		1,132	D	\$26.51	8,916	D	

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	\$26.51	02/01/2010		M			165	(1)	(1)	Common Stock	1,320	\$0	0	D	
Restricted Stock Units	\$26.51	02/01/2010		M			32	(1)	(1)	Common Stock	249	\$0	0	D	
Restricted Stock Units	\$26.51	02/01/2010		M			76	(2)	(2)	Common Stock	152	\$0	0	D	
Restricted Stock Units	\$26.51	02/01/2010		M			77	(3)	(3)	Common Stock	615	\$0	385	D	
Restricted Stock Units	\$26.51	02/01/2010		M			3,000	(4)	(4)	Common Stock	3,000	\$0	0	D	

Explanation of Responses:

- 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.
- 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.
- The restricted stock units will vest in one installment of 76 shares on August 1, 2009 and in seven equal quarterly installments of 77 shares each beginning on November 1, 2009. Vested shares will be delivered to the reporting person upon vest.
- The restricted stock units will vest in full on February 1, 2010. Vested shares will be delivered to the reporting person upon vest.

Remarks:

Deborah L. Wussler, as Attorney-in-Fact 02/02/2010

** 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.

