FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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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 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) 2. Issuer Name and Ticker or Trading Symbol 1. Name and Address of Reporting Person* MICROCHIP TECHNOLOGY INC [MCHP] PARNELL GORDON W Director 10% Owner Officer (give title Other (specify Х below) below) (Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year) VP and CFO C/O MICROCHIP TECHNOLOGY INCORPORATED 08/09/2007 2355 WEST CHANDLER BOULEVARD 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) (Street) CHANDLER 85224-6199 Х Form filed by One Reporting Person AZ 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 A Disposed Of (I	cquired (A D) (Instr. 3,) or 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 (Instr. 4)
			Code	v	Amount	(A) or (D)	Price	(Instr. 3 and 4)		(mstr. 4)
Common Stock	08/09/2007		М		2,037	A	\$15.86	8,037(1)	Ι	Held Directly and Indirectly by Trust ⁽¹⁾
Common Stock	08/09/2007		М		6,623	A	\$18.48	14,660 ⁽²⁾	I	Held Directly and Indirectly by Trust ⁽²⁾
Common Stock	08/09/2007		М		1,104	A	\$18.48	15,764 ⁽³⁾	I	Held Directly and Indirectly by Trust ⁽³⁾
Common Stock	08/09/2007		М		8,666	D	\$18.48	24,430 ⁽⁴⁾	I	Held Directly and Indirectly by Trust ⁽⁴⁾
Common Stock	08/09/2007		s		18,430	D	\$39.5721	6,000	Ι	Held by Trust

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. Transac Code (li 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	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)		
Common Stock Option (Right to Buy)	\$15.86	08/09/2007		М			2,037	06/01/2002	06/01/2011	Common Stock	2,037	\$ <mark>0</mark>	0	D	
Common Stock Option (Right to Buy)	\$18.48	08/09/2007		М			6,623	04/09/2004	04/09/2013	Common Stock	6,623	\$ <u>0</u>	0	D	
Common Stock Option (Right to Buy)	\$18.48	08/09/2007		М			1,104	04/09/2004	04/09/2013	Common Stock	1,104	\$0	0	D	
Common Stock Option (Right to Buy)	\$18.48	08/09/2007		М			8,666	03/31/2007	04/09/2013	Common Stock	8,666	\$ 0	17,334	D	

Explanation of Responses:

1. Of the 8,037 shares held, 2,037 shares were held Directly; 6,000 shares were held by Trust.

2. Of the 14,660 shares held, 8,660 shares were held Directly; 6,000 shares were held by Trust.

3. Of the 15,764 shares held, 9,764 shares were held Directly; 6,000 shares were held by Trust.

4. Of the 24,430 shares held, 18,430 shares were held Directly; 6,000 shares were held by Trust.

Deborah L. Wussler, Attorney-in-08/13/2007

Fact
** 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.

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.