

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>PARNELL GORDON W</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>05/17/2005</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>VP and CFO</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	05/17/2005		G		1,300	D	\$30	10,463	I	Held by Trust ⁽¹⁾
Common Stock	08/02/2005		M		12,190	A	\$8.963	22,653 ⁽²⁾	I	Held Directly and Indirectly, by Trust ⁽²⁾
Common Stock	08/02/2005		M		8,000	A	\$10.037	30,653 ⁽³⁾	I	Held Directly and Indirectly, by Trust ⁽³⁾
Common Stock	08/02/2005		S		20,190	D	\$31.02	10,463	I	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. 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)	\$8.963	08/02/2005		M			12,190	07/01/2001	04/17/2007	Common Stock	12,190	\$0	0	D	
Common Stock Option (Right to Buy)	\$10.037	08/02/2005		M			8,000	04/14/2000	04/14/2009	Common Stock	8,000	\$0	12,675	D	

Explanation of Responses:
1. On July 22, 2005, the Reporting Person transferred ownership of 682 shares from Direct holding to Indirect holding, by Trust.
2. Of the 22,653 shares held, 12,190 shares were held Directly; 10,463 shares were held by Trust.
3. Of the 30,653 shares held, 20,190 shares were held Directly; 10,463 shares were held by Trust.

Remarks:

Deborah L. Wussler, as Attorney-in-Fact 08/03/2005

** 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.