

NANOMETRICS INC
 Form 4
 May 22, 2008

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

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).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 Dox Joseph F

(Last) (First) (Middle)

C/O NANOMETRICS
 INCORPORATED, 1550
 BUCKEYE DRIVE

(Street)

MILPITAS, CA 95035

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol
 NANOMETRICS INC [NANO]

3. Date of Earliest Transaction
 (Month/Day/Year)
 05/21/2008

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director 10% Owner
 Officer (give title below) Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)

Form filed by One Reporting Person
 Form filed by More than One Reporting Person

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 Ownership (Instr. 4)
			Code	V	Amount or Price		
Common Stock	05/21/2008		M		6,666 A \$ 6.1	9,151	D
Common Stock	05/21/2008		S		6,600 D \$ 7.5	2,551	D
Common Stock	05/21/2008		S		66 D \$ 7.54	2,485	D
Common Stock						305	I See footnote (1)
Common Stock						1,125	I See footnote (2)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

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 Underlying Securities (Instr. 3 and 4)	Amount or Number of Shares
Non-Qualified Stock Option (right to buy)	\$ 6.1	05/21/2008		M	6,666	(3) 05/17/2012	Common Stock	13,333

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Dox Joseph F C/O NANOMETRICS INCORPORATED 1550 BUCKEYE DRIVE MILPITAS, CA 95035	X			

Signatures

/s/ Quentin Wright, by power of attorney
05/22/2008

**Signature of Reporting Person

Date

Explanation of Responses:

* 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).

- (1) Shares are held directly by the Alexia Dox Trust (the "AD Trust"). Ira Greenspan is the Trustee of the AD Trust and has sole voting and investment power over the shares held by the AD Trust. The Reporting Person disclaims beneficial ownership of these securities, and this report shall not be deemed an admission that the Reporting Person is the beneficial owner of such securities for purposes of Section 16 or for any other purpose.
- (2) Shares are held directly by the Emilie Dox Trust (the "ED Trust"). Ira Greenspan is the Trustee of the ED Trust and has sole voting and investment power over the shares held by the ED Trust. The Reporting Person disclaims beneficial ownership of these securities, and this report shall not be deemed an admission that the Reporting Person is the beneficial owner of such securities for purposes of Section 16 or

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for any other purpose.

- (3) The option is exercisable in three equal annual installments beginning on the first anniversary of the date of grant.

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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