

Moniz James P  
 Form 4  
 February 25, 2009

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

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 \*  
 Moniz James P

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)  
 C/O NANOMETRICS  
 INCORPORATED, 1550  
 BUCKEYE DRIVE

3. Date of Earliest Transaction  
 (Month/Day/Year)  
 02/18/2009

\_\_\_\_ Director \_\_\_\_\_ 10% Owner  
 Officer (give title below) \_\_\_\_\_ Other (specify below)  
 Chief Financial Officer

(Street)  
 MILPITAS, CA 95035

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

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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 Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |     |       |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|-----|-------|
|                                 |                                      |  |                                | (A) or (D)  | Code  | V  | Amount                            | (D) | Price |

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

**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 control number.**

SEC 1474  
 (9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative | 2. Conversion | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if | 4. Transaction | 5. Number of Derivative | 6. Date Exercisable and Expiration Date | 7. Title and Amount of Underlying Security |
|------------------------|---------------|--------------------------------------|-------------------------------|----------------|-------------------------|---|--|
|------------------------|---------------|--------------------------------------|-------------------------------|----------------|-------------------------|---|--|

## Edgar Filing: Moniz James P - Form 4

| Security<br>(Instr. 3)                          | or Exercise<br>Price of<br>Derivative<br>Security | any<br>(Month/Day/Year) | Code<br>(Instr. 8) | Securities<br>Acquired (A) or<br>Disposed of (D)<br>(Instr. 3, 4, and<br>5) | (Month/Day/Year) | (Instr. 3 and 4) |                     |                    |                 |                    |
|---|---|-------------------------|--------------------|---|------------------|------------------|---------------------|--------------------|-----------------|--------------------|
|   |   |                         | Code               | V   | (A)              | (D)              | Date<br>Exercisable | Expiration<br>Date | Title           | Amo<br>Num<br>Shar |
| Non-qualified<br>Stock Option<br>(Right to buy) | \$ 1.2  | 02/18/2009              | A                  |   | 100,000          |                  | <u>(1)</u>          | 02/18/2016         | Common<br>Stock | 100                |

## Reporting Owners

| Reporting Owner Name / Address  | Relationships |           |                               |       |
|---|---------------|-----------|-------------------------------|-------|
|   | Director      | 10% Owner | Officer                       | Other |
| Moniz James P<br>C/O NANOMETRICS INCORPORATED<br>1550 BUCKEYE DRIVE<br>MILPITAS, CA 95035 |               |           | Chief<br>Financial<br>Officer |       |

## Signatures

/s/ James P.  
Moniz

02/24/2009

\*\*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) One-third of the shares subject to the option vest on February 18, 2010 and one thirty-sixth of the shares shall vest monthly thereafter.
- Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.