П

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| 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

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

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| OND NUMBER. | 3233-0207 |

| 1. Name and Addres | ss of Reporting Person | n* | 2. Issuer Name and Ticker or Trading Symbol <u>AtriCure, Inc.</u> [ATRC] | | tionship of Reporting Perso all applicable) Director Officer (give title | 10% Owner Other (specify |
|-----------------------------|------------------------|----------|--|--|--|-----------------------------|
| (Last) 6217 CENTRE | (First) PARK DRIVE | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 02/09/2012 | | below) VP, Regulatory Affair | below) s and QA |
| (Street) WEST CHESTER | ОН | 45069 | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | idual or Joint/Group Filing (Form filed by One Report Form filed by More than (Person | ting Person |
| (City) | (State) | (Zip) | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

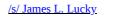
| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | Transaction Code (Instr. | | | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--|---|-----------------------------|---|---------------------------|---------------|---------|---|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (11311 4) |
| Common Stock | 02/09/2012 | | F | | 790 ⁽¹⁾ | D | \$11.05 | 50,251 | 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. Transa Code (8) | | 5. Nu of Deriv Secu Acqu (A) or Dispo of (D) (Instr and 5 | ative rities ired osed | 6. Date Exerc Expiration Da (Month/Day/Y | 7. Title Amour Securi Under Deriva Securi and 4) | nt of ties lying tive ty (Instr. 3 | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---|---|--|---|------------------------------|---|--|---------------------------------|--|--|--|---|--|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. The Reporting Person has elected to transfer these shares to the Company to satisfy the tax withholding obligation incurred upon the vesting and release of shares previously acquired pursuant to a Restricted Stock Award.



** Signature of Reporting Person

02/10/2012

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.