FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| OMB APPROVAL        |          |  |  |  |  |  |  |  |  |
|---------------------|----------|--|--|--|--|--|--|--|--|
| OMB Number:         | 3235-028 |  |  |  |  |  |  |  |  |
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|   | Check this box if no longer subject to |
|---|----------------------------------------|
| ١ | Section 16. Form 4 or Form 5           |
| ı | obligations may continue. See          |
|   | Instruction 1(b).                      |

## Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP hours per response: 0.5 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person*  Seith Douglas J  (Last) (First) (Middle)  6217 CENTRE PARK DRIVE  (Street)  WEST CHESTER OH 45069  |                                                                       |                                            |                                              |                       |                 |                 | 2. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ ATRC ]  3. Date of Earliest Transaction (Month/Day/Year) 12/31/2013  4. If Amendment, Date of Original Filed (Month/Day/Year) |       |                                    |                                              |                                                                                                                 |       |              |           |                       | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner  X Officer (give title Other (specify below)  SVP, Sales and Marketing  6. Individual or Joint/Group Filing (Check Applicable Line)  X Form filed by One Reporting Person  Form filed by More than One Reporting |                                                                   |                                                                    |                               |  |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------|----------------------------------------------|-----------------------|-----------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------|--------------|-----------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------|--|
| (City)                                                                                                                                       | (St                                                                   | ate) (                                     | Zip)                                         |                       |                 |                 |                                                                                                                                                                                            |       |                                    |                                              |                                                                                                                 |       |              |           |                       | Pers                                                                                                                                                                                                                                                                                                         | OII                                                               |                                                                    |                               |  |
|                                                                                                                                              |                                                                       | Tabl                                       | e I - No                                     | n-Deriv               | ative           | Sec             | curitie                                                                                                                                                                                    | s Acc | quired,                            | Dis                                          | posed o                                                                                                         | f, or | Bene         | efici     | ally (                | Owne                                                                                                                                                                                                                                                                                                         | ed                                                                |                                                                    |                               |  |
| 1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)                                                                                |                                                                       |                                            |                                              |                       | Execution Date, |                 | Transaction Disposed Code (Instr. 5)                                                                                                                                                       |       |                                    | ties Acquired (A) o<br>d Of (D) (Instr. 3, 4 |                                                                                                                 |       | and Secu     |           | cially<br>d Following | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)                                                                                                                                                                                                                                            | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |                                                                    |                               |  |
|                                                                                                                                              |                                                                       |                                            |                                              |                       |                 |                 |                                                                                                                                                                                            |       | Code                               | v                                            | Amount                                                                                                          |       | A) or<br>D)  | Price     |                       | Transa                                                                                                                                                                                                                                                                                                       | action(s)<br>3 and 4)                                             |                                                                    | (111341. 4)                   |  |
| Common Stock 12/31                                                                                                                           |                                                                       |                                            |                                              |                       | /2013           | 2013            |                                                                                                                                                                                            |       | A                                  | V                                            | 1,500 <sup>(1</sup>                                                                                             | 1)    | Α            | \$8.09(2) |                       | 59,931                                                                                                                                                                                                                                                                                                       |                                                                   | D                                                                  | ļ                             |  |
| Common Stock                                                                                                                                 |                                                                       |                                            |                                              |                       |                 |                 |                                                                                                                                                                                            |       |                                    |                                              |                                                                                                                 |       |              |           |                       |                                                                                                                                                                                                                                                                                                              | 3,000                                                             | I                                                                  | Held by spouse <sup>(3)</sup> |  |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |                                                                       |                                            |                                              |                       |                 |                 |                                                                                                                                                                                            |       |                                    |                                              |                                                                                                                 |       |              |           |                       |                                                                                                                                                                                                                                                                                                              |                                                                   |                                                                    |                               |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)                                                                                          | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deem<br>Execution<br>if any<br>(Month/Da | on Date, Tran<br>Code |                 | ction<br>Instr. | Str. Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)                                                                                                             |       | 6. Date E<br>Expiratic<br>(Month/D |                                              | 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)  Amoun or Numbe of Title Shares |       | ount<br>nber | nt<br>er  |                       | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)                                                                                                                                                                                                              | Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |                               |  |

## **Explanation of Responses:**

- 1. Shares acquired pursuant to the AtriCure, Inc. 2008 Employee Stock Purchase Plan for the period ended December 31, 2013.
- 2. Closing price on December 31, 2013 was \$18.68.
- 3. The Reporting Person disclaims beneficial ownership of these securities, except as to his pecuniary interest therein.

/s/ Jeanette Yacucci as Attorney-in-Fact for Douglas J. 01/03/2014 Seith

\*\* 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.