FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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| | | | | | ., | | | | | |
|--|--|---------------------------|---|---|---------------------|--|---|---|--|--|
| 1. Name and Address of Reporting Person* Seith Douglas J (Month/D 01/14/2 | | | ment | 3. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ATRC] | | | | | | |
| (Last) (First) (Middle) 6217 CENTRE PARK DRIVE | | | | Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner | | | r (Moi | 5. If Amendment, Date of Original Filed (Month/Day/Year) | | |
| (Ctroch) | | | X Officer (give title Other (specify below) | | | , I o. III | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | |
| (Street) WEST CHESTER | OH 45069 | | | SVP of Sales and Marketing | | | X | X Form filed by One Reporting Person Form filed by More than One Reporting Person | | |
| (City) | (State) (Zip) | | | | | | | | | |
| | | Table I - No | n-Deriva | tive Securities Be | neficiall | y Owned | | | | |
| 1. Title of Security (Instr. 4) | | | | Beneficially Owned (Instr. 4) Fo | | 3. Ownershi Form: Direct or Indirect ((Instr. 5) | t (D) (Instr | l. Nature of Indirect Beneficial Ownership Instr. 5) | | |
| Common Stock | | | | 52,648(1) | | D | | | | |
| Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 4) 2. Date Exercisable a Expiration Date (Month/Day/Year) | | | ate | Underlying Derivative Security (Instr. 4) Co | | | Conversion or Exercise | Exercise Form: (Instr. 5) | | |
| | | Date Exercisable | Expiration Date | n Title | | Amount or Number of Shares | Price of Derivative Security | Direct (D) or Indirect (I) (Instr. 5) | | |
| Incentive Stoc | k Option (right to buy) | 03/01/2005 ⁽²⁾ | 03/01/2014 | 4 Common St | ock | 5,263 | 1.52 | D | | |
| Incentive Stock Option (right to buy) | | 04/06/2006 ⁽²⁾ | 04/06/2015 | Common St | ock | 1,513 11.63 | | D | | |
| Incentive Stoc | Option (right to buy) 08/05/2006 ⁽²⁾ 08/05/2015 Common Stock | | ock | 2,631 | 12 | D | | | | |
| Incentive Stock Option (right to buy) | | 02/08/2007 ⁽³⁾ | 02/08/2016 | Common St | mmon Stock 5,000 11 | | 11.06 | D | | |
| Non-Qualified | Stock Option (right to buy) | 12/06/2007 ⁽³⁾ | 12/06/2016 | Common St | ock | 250 | 9.7 | D | | |
| Non-Qualified | tock Option (right to buy) 02/08/2008 ⁽³⁾ 02/08/2017 Common Stock | | ock | 200 | 12.22 | D | | | | |
| Non-Qualified | Stock Option (right to buy) | 05/28/2009 ⁽³⁾ | 05/28/2018 | Common St | ock | 1,500 | 10.1 | D | | |
| Non-Qualified | Stock Option (right to buy) | 07/30/2009 ⁽³⁾ | 07/30/2018 | Common St | ock | 10,000 | 10.05 | D | | |
| Non-Qualified | Stock Option (right to buy) | 10/28/2009 ⁽³⁾ | 10/28/2018 | Common St | ock | 512 | 5.7 | D | | |
| Non-Qualified | Stock Option (right to buy) | 10/25/2013 ⁽³⁾ | 10/25/2022 | 2 Common St | ock | 21,100 | 6.27 | D | | |
| Non-Qualified | Stock Option (right to buy) | 12/27/2013 ⁽³⁾ | 12/27/2022 | 2 Common St | ock | 100,000 | 6.73 | D | | |

Explanation of Responses:

- 1. Includes 32,500 shares of unvested restricted stock awarded under the AtriCure, Inc. 2005 Equity Incentive Plan, which vest 25% annually over four years from date of grant.
- $2. \ The \ option \ vests \ and \ is \ exercisable \ as \ to \ 25\% \ of \ the \ shares \ on \ the \ first \ four \ anniversaries \ of \ the \ grant \ date.$
- 3. The option vests and is exercisable as to 25% of the shares one year from the date of grant and the remaining 75% thereafter vests and is exercisable in equal monthly installments on the same day of the month over the following three years.

/s/ Douglas J. Seith 01/15/2013

** 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 5 (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.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints each of M. Andrew Wade, Robert Ward and Jeanette Yacucci signing singly, the undersigned's true and lawful attorney-in-fact to:

- (1) execute for and on behalf of the undersigned, Forms 3, 4 and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder with respect to the undersigned's beneficial ownership of securities of AtriCure, Inc. (the "Company").
- (2) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 and 5 and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorney-in-fact, in serving in such capacity at the request of the undersigned, are not assuming any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall not supersede any power of attorney previously executed by the undersigned and shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorney-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 15th day of January, 2013.

By: /s/ Douglas J. Seith