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

# OMB APPROVAL

hours per response:	0.5
Estimated average burd	en
OND NUMBER.	3235-0207

Lucky James (Last)			2. Issuer Name <b>and</b> Ticker or Trading Symbol <u>AtriCure, Inc.</u> [ ATRC ]     3. Date of Earliest Transaction (Month/Day/Year)     02/17/2012		tionship of Reporting Pers all applicable) Director Officer (give title below) VP, Regulatory Affa	10% Owner Other (specify below)
(Street) WEST CHESTER (City)	OH (State)	45069 (Zip)	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	idual or Joint/Group Filing Form filed by One Repo Form filed by More than Person	orting 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)						Securities Beneficially	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)		(moth 4)
Common Stock	02/17/2012		F		986 <sup>(1)</sup>	D	\$ <mark>9.95</mark>	61,765	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

02/21/2012

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.