FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPRO	JVAL				
OMB Number:	3235-0287				
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

Name and Address of Reporting Person*     Preiss Frederick							2. Issuer Name <b>and</b> Ticker or Trading Symbol AtriCure, Inc. [ ATRC ]									all app	olicable)		ssuer Owner (specify
(Last) (First) (Middle) 6217 CENTRE PARK DRIVE						3. Date of Earliest Transaction (Month/Day/Year) 02/09/2012									X	belov V	w) `` 'ice Preside	v) S	
(Street) WEST CHESTE	EST OH 45069				4. If Amendment, Date of Original Filed (Month/Day/Year)										Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person     Form filed by More than One Reporting Person				
(City)	(St	ate) (2	Zip)																
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
Date					Date Ex (Month/Day/Year) if		2A. Deemed Execution Date, if any (Month/Day/Year)		Transaction Dispose Code (Instr. 5)		Disposed	ities Acquired (A) d Of (D) (Instr. 3, 4			4 and S		ount of ities icially d Following ted	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)			,
Common Stock 02/09/									F		640(1)		D	D \$11.0		.05 22,162		D	
		Та	ble II - [								sed of, onvertib				y Ov	vned			
1. Title of Derivative Security (Instr. 3)	ve Conversion Date Execution Date, or Exercise (Month/Day/Year) if any		Date,	Code (Instr.		of		6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)		ount			9. Number of derivative Securities Beneficially Owned Following Reported Transactions (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
					Code	v	(A)	(D)	Date Exercisa		Expiration Date	Title	of	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.

/s/ Julie A. Piton as Attorneyin-Fact for Frederick C. Preiss

02/10/2012

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  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.