

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

1. Name and Address of Reporting Person* CARREL MICHAEL H (Last) (First) (Middle) 6217 CENTRE PARK DRIVE (Street) WEST CHESTER OH 45069 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ATRC]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) President, CEO and Director
	3. Date of Earliest Transaction (Month/Day/Year) 11/01/2012	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting 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)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	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			
Common Stock	11/01/2012		A		66,667	A	\$0.00 ⁽¹⁾	66,667	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. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option (right to buy)	\$5.91	11/01/2012		A		125,000		11/01/2013 ⁽²⁾	11/01/2022	Common Stock	125,000	(3)	125,000	D	
Stock Option (right to buy)	\$5.91	11/01/2012		A		225,000		(4)	11/01/2022	Common Stock	250,000	(3)	225,000	D	

Explanation of Responses:

- The Reporting Person acquired these shares pursuant to a Restricted Stock Award under the AtriCure, Inc. 2005 Equity Incentive Plan. The shares will vest four years from the date of grant.
- 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.
- Not applicable.
- Options to purchase shares in 25,000 increments vest at each Option Trigger Event. "Option Trigger Event" shall mean the volume adjusted weighted average closing price of the common stock of the Company as reported by NASDAQ (or any other exchange on which the common stock of the Company is listed) for 30 consecutive days equals or exceeds each of \$10.00 per share, \$12.50 per share, \$15.00 per share, \$17.50 per share, \$20.00 per share, \$25.00 per share, \$30.00 per share, \$35.00 per share and \$40.00 per share.

/s/ Michael H. Carrel

11/05/2012

** 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.