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## 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 OMB Number: 3235-0287 Estimated average burden

Estimated average burd	an
hours per response:	0.5

1. Name and Address of Reporting Person* HARRISON DONALD C			2. Issuer Name <b>and</b> Ticker or Trading Symbol <u>AtriCure, Inc.</u> [ ATRC ]		tionship of Reporting Per all applicable) Director	son(s) to Issuer 10% Owner
(Last) 6033 SCHUM	(First) ACHER PARK DR	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 10/28/2009		Officer (give title below)	Other (specify below)
(Street) WEST CHESTER	ОН	45069	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Indiv Line) X	idual or Joint/Group Filin Form filed by One Rep Form filed by More tha Person	orting Person
(City)	(State)	(Zip)				

#### 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)	Code (Instr.		4. Securities Disposed Of 5)			Securities	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	10/28/2009		Α		1,237	Α	<b>\$0</b> <sup>(1)</sup>	198,741	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. Nur of Deriv Secur Acqu (A) or Dispo of (D) (Instr and 5	ative rities ired osed . 3, 4	Expiration Date (Month/Day/Year) (Month/Day/Year) (Month/Day/Year)		Date Amount of			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				

Explanation of Responses:

1. Restricted shares awarded pursuant to the AtriCure, Inc. 2005 Equity Incentive Plan for services as a director. The shares will vest and be released on October 28, 2010.

<u>/s/ Julie A. Piton as Attorney-</u>	10/30/2009
in-Fact for Donald C. Harrison	10/30/2009
** 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.