

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

OMB APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* <u>HARRISON DONALD C</u> (Last) (First) (Middle) 525 UNIVERSITY AVENUE, SUITE 1400 (Street) PALO ALTO CA 94301 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>AtriCure, Inc. [ATRC]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 08/10/2006	
		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person 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	08/10/2006		X		788 ⁽¹⁾	A	\$5.96	194,079	D	
Common Stock	08/10/2006		X		788	D	\$5.96	738,417	I	Held by Charter Ventures IV Partners, LLC ⁽²⁾
Common Stock	08/10/2006		X		788	D	\$5.96	8,713	I	Held by Charter Advisors Fund IV, L.P. ⁽³⁾
Common Stock	08/10/2006		X		788	D	\$5.96	27,399	I	Held by Charter Entrepreneurs Fund IV, L.P. ⁽⁴⁾
Common Stock	08/10/2006		X		788	D	\$5.96	702,305	I	Held by Charter Ventures IV, L.P. ⁽⁵⁾

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
Common Stock Warrants (Right to Buy)	\$5.43	08/10/2006		X		8,810		04/22/2002	08/10/2006	Common Stock	788 ⁽⁶⁾	(7)	0	D	

Explanation of Responses:

- On August 10, 2006, 8,810 warrants owned by Dr. Harrison were automatically exercised pursuant to a net issue exercise, resulting in his acquisition of 788 shares of Common Stock. The warrants were exercisable at \$5.96 per share (a price equal to the closing average of the Common Stock for the 10 trading days prior to August 10, 2006).
- Dr. Harrison disclaims beneficial ownership of the securities held by this entity, except as to his pecuniary interest therein.
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- The net number of shares of Common Stock issuable upon the exercise of 8,810 warrants, calculated pursuant to the terms of the warrant.
- Not applicable.

/s/ Thomas J. Etergino as 08/14/2006
 Attorney-in-Fact for Donald C.

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.