FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL

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			16(a) of the Securities Exchange					
1. Name and Address of Reporting Person* HARRISON DONALD C	2. Date of Event Requiring Statement (Month/Day/Year) 08/04/2005		of the Investment Company Act of 1940 3. Issuer Name and Ticker or Trading Symbol AtriCure, Inc. [ATRC]					
(Last) (First) (Middle) 525 UNIVERSITY AVENUE, SUITE 1400			4. Relationship of Reporting Person(s) to Is (Check all applicable) X Director 10% O Officer (give title Other (er (Mo	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		
(Street) PALO ALTO CA 94301			below) ``	below)				
(City) (State) (Zip)								
1. Title of Security (Instr. 4)	Table I - No		tive Securities Beneficial 2. Amount of Securities	Ily Owned 3. Ownersh	nin 4 N	ature of Indirec	t Beneficial Ownership	
1. The of Security (man. 4)			Beneficially Owned (Instr. 4)	Form: Dire	Form: Direct (D) (Instr or Indirect (I)			
Common Stock			65,789	D				
			ve Securities Beneficially ants, options, convertible		s)			
Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise	5. Ownership Form:	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivative Security	tive or Indirect		
Series A Convertible Preferred Stock	(1)	(1)	Common Stock	98,135	0(1)	D		
Series B Convertible Preferred Stock	(1)	(1)	Common Stock	29,367	0(1)	D		
Series A Convertible Preferred Stock	(1)	(1)	Common Stock	397,809	0(1)	I	Held by CLS I-IV, LLC ⁽⁴⁾	
Series A Convertible Preferred Stock	(1)	(1)	Common Stock	4,771	0(1)	I	Held by Charter Advisors Fund IV, L.P. ⁽⁵⁾	
Series A Convertible Preferred Stock	(1)	(1)	Common Stock	15,130	0(1)	I	Held by Charter Entrepreneurs Fund IV, L.P. ⁽⁶⁾	
Series B Convertible Preferred Stock	(1)	(1)	Common Stock	351,691	0(1)	I	Held by CLS I-IV, LLC ⁽⁴⁾	
Series B Convertible Preferred Stock	(1)	(1)	Common Stock	4,218	0(1)	I	Held by Charter Advisors Fund IV, L.P. ⁽⁵⁾	
Series B Convertible Preferred Stock	(1)	(1)	Common Stock	13,376	0(1)	I	Held by Charter Entrepreneurs Fund IV, L.P. ⁽⁶⁾	
Preferred Stock Warrants (Right to Buy)	08/10/2005	(2)	Series B Convertible Preferred Stock ⁽¹⁾	8,810	5.43	D		
Preferred Stock Warrants (Right to Buy)	08/10/2005	(2)	Series B Convertible Preferred Stock ⁽¹⁾	34,833	5.43	I	Held by CLS I-IV, LLC ⁽⁴⁾	
Preferred Stock Warrants (Right to Buy)	08/10/2005	(2)	Series B Convertible Preferred Stock ⁽¹⁾	661	5.43	I	Held by Charter Advisors Fund IV, L.P. ⁽⁵⁾	
Preferred Stock Warrants (Right to Buy)	08/10/2005	(2)	Series B Convertible Preferred Stock ⁽¹⁾	1,865	5.43	I	Held by Charter Entrepreneurs Fund IV, L.P. ⁽⁶⁾	
Stock Option (Right to Buy)	03/29/2002 ⁽³⁾	03/29/2011	Common Stock	11,315	0.57	D		

- 1. The shares of Preferred Stock convert on a 1-for-1 basis into Common Stock upon the closing of the Issuer's initial public offering.
- 2. Warrants expire on August 10, 2006 (one year from the date of the Issuer's initial public offering).
- 3. Exercisable cumulatively at a rate of 25% per annum commencing on March 29, 2002 (one year from the date of grant).
- 4. Dr. Harrison is a manager of CLS I-IV, LLC and disclaims beneficial ownership of the securities held by this entity, except as to his pecuniary interest therein.
- 5. Dr. Harrison disclaims beneficial ownership of the securities held by this entity, except as to his pecuniary interest therein.
- 6. Dr. Harrison disclaims beneficial ownership of the securities held by this entity, except as to his pecuniary interest therein.

/s/ Thomas J. Etergino as Attorney-in-Fact for Donald C. 08/15/2005 Harrison

** 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 5 (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.

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints David J. Drachman and Thomas J. Etergino, and each of them, his true and lawful attorney-in-fact to:

- (1) Execute for and on behalf of the undersigned, in the undersigned's capacity as an officer, director or 10% holder of AtriCure, Inc. (the "Company"), a reporting company under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), any and all Forms 3, 4 and 5 required to be filed by the undersigned in accordance with Section 16(a) of the Exchange Act and the rules thereunder;
- (2) Do and perform any and all acts for and on behalf of the undersigned W hich may be necessary or desirable to complete and execute any such Form 3, 4 and 5 and timely file such form with the United States Securities and Exchange Commission and any stock exchange or similar authority; and
- (3) Take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned, pursuant to this Power of Attorney, shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in his discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform all and every act and thing whatsoever requisite, necessary, and proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or his substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that no such attorney-in-fact, in serving in such capacity at the request of the undersigned, is hereby assuming, nor is the Company hereby assuming, any of the undersigned's responsibilities to comply

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the un dersigned in a signed writing delivered to the foregoing attorney-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 15th day of August, 2005.

By: /s/ Donald C. Harrison

&

nbsp; Name: Donald C. Harrison

with Section 16 of the Exchange Act of 1934.