

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

SCHEDULE 13G  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2  
(AMENDMENT NO. New)

AtriCure, Inc.

-----  
(Name of Issuer)

Common Stock, \$0.001 Par Value

-----  
(Title of Class of Securities)

04963C209

-----  
(CUSIP Number)

12/31/05

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(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

/X/ Rule 13d-1(b)  
/ / Rule 13d-1(c)  
/ / Rule 13d-1(d)

-----  
\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP NO. 04963C209

13G

PAGE 2 OF 4 PAGES

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1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Massachusetts Financial Services Company ("MFS")  
I.R.S. Identification No.: 04-2747644

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
(a) / / (b) / / Not Applicable

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

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NUMBER OF 5 SOLE VOTING POWER

SHARES 917,110 shares of common stock

BENEFICIALLY

OWNED BY 6 SHARED VOTING POWER  
EACH None

REPORTING 7 SOLE DISPOSITIVE POWER  
PERSON 942,010 shares of common stock  
WITH

8 SHARED DISPOSITIVE POWER  
None

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

942,010 shares of common stock, of which shares are also beneficially owned by certain other non-reporting entities as well as MFS.

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\* / /

Not applicable

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

7.8

12 TYPE OF REPORTING PERSON

IA

ITEM 1: (a) NAME OF ISSUER:

SEE COVER PAGE

(b) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

6033 Schumacher Park Drive  
West Chester, OH 45069

ITEM 2: (a) NAME OF PERSON FILING:

See item 1 on page 2

(b) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

500 Boylston Street  
Boston, MA 02116

(c) CITIZENSHIP:

See Item 4 on page 2

(d) TITLE OF CLASS OF SECURITIES:

See Cover Page

(e) CUSIP NUMBER:

See Cover Page

ITEM 3: The person filing is an investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E)

ITEM 4: OWNERSHIP

(a) AMOUNT BENEFICIALLY OWNED:

See Item 9 on page 2

(b) PERCENT OF CLASS:

See Item 11 on page 2

(c) NUMBER OF SHARES AS TO WHICH SUCH PERSON HAS VOTING AND DISPOSITIVE POWERS (SOLE AND SHARED):

See Items 5-8 on page 2

- ITEM 5: OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS: / /  
Not applicable
- ITEM 6: OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:  
Not applicable
- ITEM 7: IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH  
ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING  
COMPANY:  
Not applicable
- ITEM 8: IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:  
Not applicable
- ITEM 9: NOTICE OF DISSOLUTION OF GROUP:  
Not applicable
- ITEM 10: CERTIFICATIONS:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 10, 2006

Massachusetts Financial Services Company

By: /s/ JEREMY KREAM  
Jeremy Kream  
Vice President and Assistant Secretary