

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No.)*

AtriCure Inc

(Name of Issuer)

Common Stock

(Title of Class of Securities)

04963C209

(CUSIP Number)

December 31, 2020

(Date of Event Which Requires Filing of this Statement)

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

- 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 (the "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.)

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

Invesco Ltd.
98-0557567

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a)

(b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Bermuda

NUMBER OF 5. SOLE VOTING POWER 2,179,898

SHARES

BENEFICIALLY 6. SHARED VOTING POWER 0

OWNED BY

EACH 7. SOLE DISPOSITIVE POWER 2,252,138

REPORTING

PERSON WITH 8. SHARED DISPOSITIVE POWER 0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,252,138

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.0%

12. TYPE OF REPORTING PERSON

HC, IA

Item 1.

- (a) **Name of Issuer**
AtriCure Inc
- (b) **Address of Issuer's Principal Executive Offices**
7555 Innovation Way, Mason, OH 45040

Item 2.

- (a) **Name of Person Filing**
Invesco Ltd. ("Invesco Ltd.")
- (b) **Address of Principal Business Office or, if None, Residence**
1555 Peachtree Street NE, Suite 1800, Atlanta, GA 30309
- (c) **Citizenship**
Bermuda
- (d) **Title of Class of Securities**
Common Stock
- (e) **CUSIP Number**
04963C209

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a) Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o).
- (b) Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance Company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) Investment Company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) An investment adviser in accordance with Rule 240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 240.13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) Group, in accordance with Rule 240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) **Amount Beneficially Owned:**
Invesco Ltd. , in its capacity as a parent holding company to its investment advisers, may be deemed to beneficially own 2,252,138 shares of the Issuer which are held of record by clients of Invesco Ltd. ..
- (b) **Percent of Class:**
5.0%
- (c) **Number of shares as to which such person has:**
- | | | |
|-------|---|-----------|
| (i) | sole power to vote or to direct the vote | 2,179,898 |
| (ii) | shared power to vote or to direct the vote | 0 |
| (iii) | sole power to dispose or to direct the disposition of | 2,252,138 |
| (iv) | shared power to dispose or to direct the disposition of | 0 |

Item 5. Ownership of Five Percent or Less of Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following:

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

However, no one individual has greater than 5% economic ownership. The shareholders of the Fund have the right to receive or the power to direct the receipt of dividends and proceeds from the sale of securities listed above.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Invesco Advisers, Inc.
Invesco Asset Management Ltd
Invesco Canada Ltd
Invesco Capital Management LLC

Item 8. Identification and Classification of Members of the Group.

Not Applicable. This schedule is not being filed pursuant to Rule 13d-1(b)(1)(ii)(J) or Rule 13d-1(d).

Item 9. Notice of Dissolution of Group.

Not Applicable

Item 10. Certification.

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.

Invesco Ltd.

By: /s/ Robert R. Leveille

Date: February 16, 2021

Name: Robert R. Leveille

Title: Global Assurance Officer

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) (l) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing of the attached Schedule 13G, and any and all amendments thereto, and expressly authorize Invesco Ltd., as the ultimate parent company of each of its undersigned subsidiaries, to file such Schedule 13G, and any and all amendments thereto, on behalf of each of them.

Dated: 02/10/2021

Invesco Ltd.

By: /s/ Robert R. Leveille

Name: Robert R. Leveille

Title: Global Assurance Officer

Invesco Advisers, Inc.

By: /s/ Todd F. Kuehl

Name: Todd F. Kuehl

Title: Chief Compliance Officer

Invesco Canada Ltd.

By: /s/ Kate Archibald

Name: Kate Archibald

Title: SVP, Head of Compliance, and Chief Compliance Officer

Invesco Trust Company

By: /s/ Odeh Stevens

Name: Odeh Stevens

Title: Authorized Signatory

Invesco Hong Kong Limited

By: /s/ Lee Siu Mei

Name: Lee Siu Mei

Title: Authorized Signatory

Invesco Hong Kong Limited

By: /s/ Pang Sin Chu

Name: Pang Sin Chu

Title: Authorized Signatory

Invesco Asset Management Deutschland GmbH

By: /s/ Alexander Taft

Name: Alexander Taft

Title: MD - Struct. Finance, Europe

Invesco Asset Management Limited

By: /s/ Chris Edge

Name: Chris Edge

Title: Head of UK Compliance

Invesco Management S.A.

By: /s/ Peter Carroll

Name: Peter Carroll

Title: Head EMEA Delegation Oversight

Invesco Taiwan Limited

By: /s/ Jacky Hsiao

Name: Jacky Hsiao

Title: General Manager

Invesco Asset Management (Japan) Limited

By: /s/ Tsuyoshi Mochiyama

Name: Tsuyoshi Mochiyama

Title: Head of Compliance

Invesco Asset Management Singapore Limited

By: /s/ Lee Siu Mei

Name: Lee Siu Mei

Title: Authorized Signatory

Invesco Asset Management Singapore Limited

By: /s/ Pang Sin Chu

Name: Pang Sin Chu

Title: Authorized Signatory

Invesco Capital Management, LLC

By: /s/ Melanie Zimdars

Name: Melanie Zimdars

Title: CCO, ICM & ETFs

Invesco Investment Advisers, LLC

By: /s/ Trisha B Hancock

Name: Trisha B Hancock

Title: CCO, Broker-Dealers and UITs

Invesco Australia Ltd.

By: /s/ Tas Seedat

Name: Tas Seedat

Title: Senior Compliance Manager

Invesco Private Capital, Inc.

By: /s/ Josh E Levit

Name: Josh E Levit

Title: Chief Compliance Officer

OppenheimerFunds, Inc.

By: /s/ Donna White

Name: Donna White

Title: Compliance Director

Invesco Real Estate Management S.A.R.L.

By: /s/ Fabrice Coste

Name: Fabrice Coste

Title: Compliance Director

Invesco Real Estate Management S.A.R.L.

By: /s/ Marion Geniaux

Name: Marion Geniaux

Title: Senior Director, Fund Accounting