## ANALOGIC CORP Form SC 13G/A February 10, 2012

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 4)\*

ANALOGIC CORPORATION (Name of Issuer)

COMMON STOCK (Title of Class of Securities)

> 032657207 (CUSIP Number)

December 31, 2011 (Date of Event Which Requires Filing of this Statement)

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

| [ | Х | ] | 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.

CUSIP No. 032657207

1. NAME OF REPORTING PERSONS

HEARTLAND ADVISORS, INC.

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

(a) [ ] (b) [ ]

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

WISCONSIN, U.S.A.

| NUMBER OF           | 5. | SOLE VOTING POWER      |
|---------------------|----|------------------------|
| SHARES BENEFICIALLY |    |                        |
| OWNED BY            |    | None                   |
| EACH                |    |                        |
| REPORTING           | 6. | SHARED VOTING POWER    |
| PERSON              |    |                        |
| WITH                |    | 1,481,470              |
|                     |    |                        |
|                     | 7. | SOLE DISPOSITIVE POWER |

None

8. SHARED DISPOSITIVE POWER

1,481,470

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9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,481,470

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

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

12.1%

12. TYPE OF REPORTING PERSON

IA

CUSIP No. 032657207

1. NAME OF REPORTING PERSONS

WILLIAM J. NASGOVITZ

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

(a) [ ] (b) [ ]

3. SEC USE ONLY

## 4. CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

| NUMBER OF   | 5. SOLE VOTING POWER                                |  |  |  |  |
|---|---|--|--|--|--|
| SHARES BENEFICIALLY   |   |  |  |  |  |
| OWNED BY<br>EACH  | None  |  |  |  |  |
| REPORTING<br>PERSON   | 6. SHARED VOTING POWER                              |  |  |  |  |
| WITH  | 1,481,470   |  |  |  |  |
|   | 7. SOLE DISPOSITIVE POWER                           |  |  |  |  |
|   | None  |  |  |  |  |
|   | 8. SHARED DISPOSITIVE POWER                         |  |  |  |  |
|   | 1,481,470   |  |  |  |  |
| 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON   |   |  |  |  |  |
| 1,481,470   |   |  |  |  |  |
| 10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  |   |  |  |  |  |
| 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9   |   |  |  |  |  |
| 12.1%   |   |  |  |  |  |
| 12. TYPE OF REPORTING PERSON  |   |  |  |  |  |
| IN  |   |  |  |  |  |
|   |   |  |  |  |  |
| Item 1.<br>(a) Name of Issuer: ANALOGIC CORPORATION   |   |  |  |  |  |
| (b) Address of Issuer's Principal Executive Offices:<br>8 Centennial Drive<br>Peabody, Massachusetts 01960                                      |   |  |  |  |  |
| Item 2.   |   |  |  |  |  |
| (a) Names of Persons H  | Filing: (1) Heartland Advisors, Inc.                |  |  |  |  |
|   | (2) William J. Nasgovitz                            |  |  |  |  |
| (b) Address of Princip  | pal Business Office:                                |  |  |  |  |
| All reporting persons m<br>Street, Milwauke   | may be contacted at 789 North Water<br>ee, WI 53202 |  |  |  |  |
| (c) Citizenship or Place of Organization: Heartland Advisors is a<br>Wisconsin corporation. William J. Nasgovitz is a United<br>States citizen. |   |  |  |  |  |
| (d) Title of Class of   | Securities: Common Stock                            |  |  |  |  |

(e) CUSIP Number: 032657207

Item 3.

If this statement is filed pursuant to Sections 240.13d-1(b) or 240.13d-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. 780);

(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) [X] \* An investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E);

(f) [ ] An employee benefit plan or endowment fund in accordance with Section 240.13d-1 (b) (1) (ii) (F);

(g) [X] \* A parent holding company or control person in accordance with Section 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) [] A non-U.S. institution in accordance with Section 240.13d-1(b)(1)(ii)(J);

(k) [] Group, in accordance with Section 240.13d-1(b)(1)(ii)(K).

\* The persons filing this Schedule 13G are Heartland Advisors, Inc., an investment adviser registered with the SEC, and William J. Nasgovitz, President and control person of Heartland Advisors, Inc. The reporting persons do not admit that they constitute a group.

Item 4. Ownership.

(a) Amount beneficially owned:

1,481,470 shares may be deemed beneficially owned within the meaning of Rule 13d-3 of the Act by (1) Heartland Advisors, Inc. by virtue of its investment discretion and voting authority granted by certain clients, which may be revoked at any time; and (2) William J. Nasgovitz, by virtue of his control of Heartland Advisors, Inc.

 $\operatorname{Mr.}$  Nasgovitz disclaims beneficial ownership of any shares reported on the Schedule.

(b) Percent of Class: 12.1%

(c) For information on voting and dispositive power with respect to the above listed shares, see Items 5-9 of the Cover Pages.

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

The clients of Heartland Advisors, Inc., a registered investment adviser, including an investment company registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive or the power to direct the receipt of dividends and proceeds from the sale of shares included on this Schedule. The Heartland Value Fund, a series of the Heartland Group, Inc., a registered investment company, owns 700,000 shares or 5.7% of the class of securities reported herein. The Heartland Value Plus Fund, a series of the Heartland Group, Inc., a registered investment company, owns 750,000 shares or 6.1% of the class of securities reported herein. Any remaining shares disclosed in this filing are owned by various other accounts managed by Heartland Advisors, Inc. on a discretionary basis. To the best of Heartland Advisors' knowledge, none of the other accounts owns more than 5% of the outstanding stock.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

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. Certification.

By signing below, the undersigned certify that, to the best of their 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 their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

DATE: February 10, 2012 WILLIAM J. NASGOVITZ HEARTLAND ADVISORS, INC. By: /s/ PAUL T. BESTE Paul T. Beste As Attorney in Fact for William J. Nasgovitz (Pursuant to Power of Attorney Previously Filed)

EXHIBIT INDEX

Exhibit 1 Joint Filing Agreement

EXHIBIT 1

Joint Filing Agreement

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, each of the undersigned hereby agrees to the joint filing with the other reporting person of a statement on Schedule 13G (including amendments thereto) with respect to the common stock, \$0.05 par value, of ANALOGIC CORPORATION and that this Agreement be included as an Exhibit to such joint filing. IN WITNESS WHEREOF, the undersigned hereby execute this Agreement this 10th day of February, 2012.

WILLIAM J. NASGOVITZ

By: /s/ PAUL T. BESTE Paul T. Beste As Attorney in Fact for William J. Nasgovitz (Pursuant to Power of Attorney Previously Filed)

HEARTLAND ADVISORS, INC.

By: /s/ PAUL T. BESTE Paul T. Beste Chief Operating Officer