

COGNEX CORP  
Form SC 13G/A  
February 10, 2010

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

**SCHEDULE 13G**

**Under the Securities Exchange Act of 1934  
(Amendment No. 20)\***

COGNEX CORPORATION

(Name of Issuer)

Common Stock

(Title of Class of Securities)

192422103

(CUSIP Number)

December 31, 2009

(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 ( 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).

---

CUSIP No. 192422103 13G Page 2 of 6 Pages

NAMES OF REPORTING PERSONS.

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY).

1.

Robert J. Shillman

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2.

(a)

(b)

SEC USE ONLY

3.

CITIZENSHIP OR PLACE OF ORGANIZATION

4.

USA

SOLE VOTING POWER

5.

NUMBER OF 3,726,356 (1)

SHARED VOTING POWER

6.

SHARES BENEFICIALLY OWNED BY

SOLE DISPOSITIVE POWER

7.

EACH REPORTING PERSON

3,726,356 (1)

SHARED DISPOSITIVE POWER

8.

WITH:

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

9.

3,726,356 (1)

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

o

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

94%

**12.** TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

(1) Aggregate amount of beneficial ownership includes (i) 3,533,906 shares held by Mr. Shillman, and (ii) options exercisable as of December 31, 2009 or exercisable within sixty days of December 31, 2009 to purchase 184,750 shares. Also includes 700 shares owned by Mr. Shillman's spouse and 7,000 shares owned by Mr. Shillman's children which Mr. Shillman may be deemed to beneficially own, but as to which he disclaims beneficial ownership.

CUSIP No. 192422103 13G Page 3 of 6 Pages

**Item 1(a). Name of Issuer:**

COGNEX CORPORATION

**Item 1(b). Address of Issuer's Principal Executive Offices:**

One Vision Drive, Natick, MA 01760

**Item 2(a). Name of Person Filing:**

Robert J. Shillman

**Item 2(b). Address of Principal Business Office or, if None, Residence:**

c/o Cognex Corporation, One Vision Drive, Natick, MA 01760

**Item 2(c). Citizenship:**

USA

**Item 2(d). Title of Class of Securities:**

Common Stock

**Item 2(e). CUSIP Number:**

192422103

**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 Exchange Act;
- (b)  Bank as defined in Section 3(a)(6) of the Exchange Act;
- (c)  Insurance company as defined in Section 3(a)(19) of the Exchange Act;
- (d)  Investment company registered under Section 8 of the Investment Company Act;
- (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with Rule 3d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;

- (i) o A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;

CUSIP No. 192422103

13G

Page 4 of 6 Pages

(j) o Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

**Item 4. Ownership.**

(a) Amount beneficially owned:

3,726,356 (1)

(b) Percent of class:

9.4% (2)

(c) Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote 3,726,356 (1)

(ii) Shared power to vote or to direct the vote 0

(iii) Sole power to dispose or to direct the disposition of 3,726,356 (1)

(iv) Shared power to dispose or to direct the disposition of 0

(1) Aggregate amount of beneficial ownership includes (i) 3,533,906 shares held by Mr. Shillman, and (ii) options exercisable as of December 31, 2009 or exercisable within sixty days of December 31, 2009 to purchase 184,750 shares. Also includes 700 shares owned by Mr. Shillman s spouse and 7,000 shares owned by Mr. Shillman s children which

Mr. Shillman may be deemed to beneficially own, but as to which he disclaims beneficial ownership.

- (2) Based on 39,850,264 shares of common stock outstanding as of December 31, 2009, and 184,750 shares subject to options exercisable as of December 31, 2009 or exercisable within sixty days of December 31, 2009.

**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: o

**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 or Control Person.**

Not applicable

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

Not applicable

CUSIP No. 192422103 13G Page 5 of 6 Pages

**Item 9. Notice of Dissolution of Group.**

Not applicable

**Item 10. Certifications.**

Not applicable

**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.

February 10, 2010  
(Date)

/s/ Robert J. Shillman  
(Signature)

Robert J. Shillman  
(Name/Title)

5