COGNEX CORP Form SC 13G/A August 05, 2004

UNITED STATES WASHINGTON, D.C. 20549

SCHEDULE 13G UNDER THE SECURITIES EXCHANGE ACT OF 1934 (AMENDMENT NO. __1_)*

Cognex Corp.

(Name of Issuer)

<u>Common Stock</u> (Title of Class of Securities)

192422103

(Cusip Number)

*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 disclosures provided in a prior cover page.

The information required on 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).

SCHEDULE 13G

CUSII	P No.	192422	103		Page 2 of 6 Pages		
1. NAMES OF REPORTING PERSONS S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS . Brown Capital Management, Inc							
2. CHI	ECK THE AF	(a)[] (b)[]					
3. SEC	USE ONLY						
4. CITIZENSHIP OR PLACE OF ORGANIZATION Maryland							
SHARE BENEF EACH	RTING NUM ES FICIALLY O' ON WITH		6 7.	SOLE VOTING POWER SHARED VOTING POWER SOLE DISPOSITIVE POWER SHARED DISPOSITIVE POWER	1,291,104 None 2,677,379 None		
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH 2,677,379 REPORTING PERSON							
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES							
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.92%							
12. TYPE OF REPORTING PERSON*				IA	IA CO		
CUSIP	No.	192422	103		Page 3 of 6 Pages		
Item 1	(a) (b)	Name of Issuer Address of Issu		Cognex Corp. One Vision Drive Natick, MA 01760-2059			
Item 2	(a) (b)	Name of Persor Address of Prin Office or, if nor	cipal Business	Brown Capital Management, I 1201 N. Calvert Street Baltimore, Maryland 21202	Inc		
	(c) (d)	Citizenship: Title of Class of	f Securities:	Maryland Common Stock			

192422103

(e) CUSIP Number:

Item 3: Capacity in Which Person is Filing: [x] Investment Adviser registered

under

Section 203 of the Investment

Advisers Act of 1940

192422103 Page 4 of 6 Pages CUSIP No. Item 4: Ownership As of July 31, 2004: Amount Beneficially Owned: 2,677,379 (a) (b) Percent of class: 5.92% (c) Number of shares to which such person has: (i) Sole power to vote or to direct the vote: 1,291,104 Shared power to vote or to direct the vote: (ii) None Sole power to dispose or to direct the 2,677,379 (iii) disposition of: None (iv) Shared power to dispose or to direct the

Item 5: Ownership of Five Percent of Less of Class: Not applicable

disposition of:

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

All of the shares of Common Stock set forth in Item 4 are owned by various investment advisory clients of Brown Capital Management, Inc., which is deemed to be a beneficial owner of those shares pursuant to Rue 13d-3 under the Securities Exchange Act of 1934, due to it discretionary power to make investment decisions over such shares for its clients and its ability to vote such shares. In all cases, persons other than Brown Capital Management, Inc. has the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of the shares. No individual client holds more than five percent of the class.

Item 7: Identification and Classification of the Subsidiary Not applicable

Which Acquired the Security Being Reported on By

the Parent Holding Company:

Item 8: Identification and Classification of Members of the Group: Not applicable

Item 9:	Notice of Dissolution of C	oroup: Not applicable
CUSIP No.	192422103	Page 6 of 6 Pages
Item 10:	Certification:	
referred to ab for the purpo issuer of such transaction h SIGNATUI After reason	pove were acquired in the or se of and do not have the ef h securities and were not ac aving such purposes or effe RE nable inquiry and to the bes	best of my knowledge and belief, the securities redinary course of business and were not acquired ffect of changing or influencing the control of the quired in connection with or as a participant in any sect of my knowledge and belief, I certify that it is true, complete and correct.
		Brown Capital Management, Inc.
		By: /s/ Eddie C. Brown
		Eddie C. Brown
		President
Date:		July 31, 2004