CIENA CORP Form SC 13G February 13, 2007

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Schedule 13G

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

CIENA CORP.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

171779309

(CUSIP Number)

Check the following box if a fee is being paid with this statement _____. (A fee is not required only if the filing person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.) (See Rule 13d-7.)

*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).

(Continued on following page(s)

Page 1 of 5 Pages CUSIP NO. 171779309 13G Page 2 of 5 Pages

- 1 Name of Reporting Person S.S. or I.R.S. Identification No. of Above Person
 - T. ROWE PRICE ASSOCIATES, INC.

	52-0556948			
2	Check the A	ppr	opriate Box if a Member of a Group*	
	NOT APPLICA	BLE		(a) (b)
3	SEC Use Onl	У		
4	_	or	Place of Organization	
	MARYLAND			
Nui	mber of	5 **	Sole Voting Power	
Sha	ares		753,205	
Bei	neficially	6 **	Shared Voting Power	
Ow	ned By Each		-0-	
Rej	porting	7 **	Sole Dispositive Power	
Pe	rson	**	5,053,681	
With		8	Shared Dispositive Power	
			-0-	
9	Aggregate A	mou	nt Beneficially Owned by Each Report	ing Person
	5,053,681			
10	Check Box i Shares*	ft	he Aggregate Amount in Row (9) Exclu	des Certain
	NOT APPLICA	BLE		
11	Percent of	Cla	ss Represented by Amount in Row 9	
	5.9%			
12	Type of Rep	ort	ing Person*	
	IA			
~ ~ ~	_		EE INSTRUCTION BEFORE FILLING OUT! ares reported in Items 5 and 6 are a reported in Item 7.	lso
SCI PA	HEDULE 13G GE 3 OF	5		
It	em 1(a) Name	of	Issuer:	
	Refe	ren	ce is made to page 1 of this Schedul	.e 13G
It	em 1(b) Addr	ess	of Issuer's Principal Executive Off	ices:
	1201	Wi	nterson Road, Linthicum, MD 21090	

			Edgar Filing: CIENA CORP - Form SC 13G
Item	2 (a)	Name of Person(s) Filing:
			<pre>(1) T. Rowe Price Associates, Inc. ("Price Associates")</pre>
			(2)
	-		Attached as Exhibit A is a copy of an agreement betweer the Persons Filing (as specified hereinabove) that this Schedule 13G is being filed on behalf of each of them.
Item	2 (b)	Address of Principal Business Office:
			100 E. Pratt Street, Baltimore, Maryland 21202
Item	2 (C)	Citizenship or Place of Organization:
			(1) Maryland
			(2)
Item	2 (d)	Title of Class of Securities:
			Reference is made to page 1 of this Schedule 13G
Item	2 (CUSIP Number: 171779309
	_ ,	- /	
Item	3		The person filing this Schedule 13G is an:
Х			Investment Adviser registered under Section 203 of the Investment Advisers Act of 1940
	_		Investment Company registered under Section 8 of the Investment Company Act of 1940
Item SCHEI			Reference is made to Items 5-11 on page 2 of this Schedule 13G.
PAGE		4	OF 5
Item	5	Own	mership of Five Percent or Less of a Class.
Х		Not	Applicable.
	_	of (ha	is statement is being filed to report the fact that, as the date of this report, the reporting person(s) has ave) ceased to be the beneficial owner of more than five scent of the class of securities.
Item	6		ership of More than Five Percent on Behalf of Another rson
		(1)	Price Associates does not serve as custodian of the assets of any of its clients; accordingly, in each instance only the client or the client's custodian or trustee bank has the right to receive dividends paid with respect to, and proceeds from the sale of, such

The ultimate power to direct the receipt of dividends

securities.

paid with respect to, and the proceeds from the sale of, such securities, is vested in the individual and institutional clients which Price Associates serves as investment adviser. Any and all discretionary authority which has been delegated to Price Associates may be revoked in whole or in part at any time.

Except as may be indicated if this is a joint filing with one of the registered investment companies sponsored by Price Associates which it also serves as investment adviser ("T. Rowe Price Funds"), not more than 5% of the class of such securities is owned by any one client subject to the investment advice of Price Associates.

- (2) With respect to securities owned by any one of the T. Rowe Price Funds, only State Street Bank and Trust Company, as custodian for each of such Funds, has the right to receive dividends paid with respect to, and proceeds from the sale of, such securities. No other person is known to have such right, except that the shareholders of each such Fund participate proportionately in any dividends and distributions so paid.
- 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. SCHEDULE 13G PAGE 5 OF 5

Item 9 Notice of Dissolution of Group.

Not Applicable.

By signing below I (we) certify that, to the best of my (our) knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect. T. Rowe Price Associates, Inc. hereby declares and affirms that the filing of Schedule 13G shall not be construed as an admission that Price Associates is the beneficial owner of the securities referred to, which beneficial ownership is expressly denied.

Signature.

After reasonable inquiry and to the best of my (our) knowledge and belief, I (we) certify that the information set forth in this statement is true,

Item 10 Certification.

 $\ensuremath{\mathsf{complete}}$ and $\ensuremath{\mathsf{correct.}}$

Dated: February 14, 2007

T. ROWE PRICE ASSOCIATES, INC.

- By: /s/ Henry H. Hopkins Henry H. Hopkins, Vice President
- Note: This Schedule 13G, including all exhibits, must be filed with the Securities and Exchange Commission, and a copy hereof must be sent to the issuer by registered or certified mail not later than February 14th following the calendar year covered by the statement or within the time specified in Rule 13d-1(b)(2), if applicable.

12/31/2006