

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 27, 2002
POST-EFFECTIVE AMENDMENT NO. 1 TO REGISTRATION STATEMENT ON FORM S-8
(NO. 333-38290)

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

POST-EFFECTIVE AMENDMENT NO. 1
TO FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CIENA CORPORATION
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE
(STATE OR OTHER JURISDICTION OF
INCORPORATION OR ORGANIZATION)

23-2725311
(I.R.S. EMPLOYER
IDENTIFICATION NUMBER)

1201 Winterson Road
Linthicum, Maryland 21090
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

1997 Stock Plan
1998 Equity Incentive Plan
1999 Equity Incentive Plan
Davis Stock Option Plan and Agreement
2000 Equity Incentive Plan
2000 Employee Stock Purchase Plan
(FULL TITLE OF THE PLAN)

Russell B. Stevenson, Jr.
Senior Vice President, General Counsel and Secretary
CIENA Corporation
1201 Winterson Road
Baltimore, Maryland 21090
(410) 865-8939
(NAME AND ADDRESS OF AGENT FOR SERVICE)
(TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

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RECENT EVENTS: DEREGISTRATION

The Registration Statement of Form S-8 (Registration No. 333-38290) ("Registration Statement") of ONI Systems Corp., a Delaware corporation ("ONI Systems"), pertaining to the registration of 28,427,439 shares of ONI Systems Common Stock, par value \$0.0001 per share, to which this Post Effective Amendment No. 1 relates, was filed with the Securities and Exchange Commission on June 1, 2000.

CIENA Corporation, a Delaware corporation ("CIENA") and ONI Systems entered into an Agreement and Plan of Merger, dated February 17, 2002 (the "Merger Agreement"), pursuant to which, among other things, ONI Systems would be merged with and into CIENA and all outstanding shares of ONI Systems Common Stock, par value \$0.0001 per share, would be converted into the right to receive 0.7104 shares of CIENA Common Stock, \$0.01 par value per share and cash in lieu of any fractional shares (these actions are collectively referred to as the "Merger").

On June 18, 2002, ONI Systems held a special meeting of stockholders at which ONI Systems' stockholders approved and adopted the Merger Agreement and the transactions contemplated thereby and approved the Merger. The Merger became effective following the filing of a Certificate of Merger with the Secretary of State of the State of Delaware on June 21, 2002 (the "Effective Time").

As a result of the Merger, all offerings of ONI Systems Common Stock pursuant to the Registration Statement have been terminated. In accordance with an undertaking made by ONI Systems in the Registration Statement to remove from registration, by means of a post-effective amendment, any shares of ONI Systems Common Stock which remain unsold at the termination of the offering, CIENA, as the successor by merger to ONI Systems, hereby removes from registration all shares of ONI Systems Common Stock registered under the Registration Statement which remain unsold as of the Effective Time. The shares deregistered by this Post-Effective Amendment No. 1 will be registered by a subsequently filed registration statement on Form S-8 by CIENA.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Linthicum, State of Maryland, on June 27, 2002.

CIENA Corporation

By: /s/ Russell B. Stevenson, Jr.

Russell B. Stevenson, Jr.
Senior Vice President, General Counsel and Secretary