TERAYON COMMUNICATION SYSTEMS Form 424B3 August 22, 2001

Filing Pursuant to Rule 424(b)(3) Registration Statement No. 333-48536

PROSPECTUS SUPPLEMENT NO. 16 DATED AUGUST 22, 2001 TO PROSPECTUS DATED JANUARY 22, 2001

TERAYON COMMUNICATION SYSTEMS, INC.

\$500,000,000

of 5% Convertible Subordinated Notes Due 2007 and 5,951,673 Shares of Common Stock Issuable upon Conversion of the Notes

Please read this prospectus supplement in conjunction with the prospectus dated January 22, 2001 (the "Prospectus"). The table on pages 21 through 24 of the Prospectus setting forth information concerning the selling holders, prospectus supplement no. 1 dated February 9, 2001, prospectus supplement no. 2 dated February 16, 2001, prospectus supplement no. 3 dated February 20, 2001, prospectus supplement no. 4 dated February 23, 2001, prospectus supplement no. 5 dated March 2, 2001, prospectus supplement no. 6 dated March 9, 2001, prospectus supplement no. 7 dated March 16, 2001, prospectus supplement no. 8 dated March 23, 2001, prospectus supplement no. 9 dated April 27, 2001, prospectus supplement no. 10 dated May 4, 2001, prospectus supplement no. 11 dated May 11, 2001, prospectus supplement no. 12 dated May 25, 2001, prospectus supplement no. 13 dated June 4, 2001, prospectus supplement no. 14 dated July 13, 2001 and prospectus no. 15 dated July 27, 2001 are superseded by the following table:

SELLING HOLDERS

We originally issued the Notes and the Notes were sold by the initial purchasers in a transaction exempt from the registration requirements of the Securities Act to persons reasonably believed by the initial purchasers to be qualified institutional buyers or other institutional accredited investors. Selling holders, including their transferees, pledgees, donees or successors, may from time to time offer and sell pursuant to this prospectus any or all of the Notes and common stock into which the Notes are convertible. We agree to use reasonable efforts to keep the registration statement effective until July 26, 2002. Our registration of the Notes and the shares of common stock into which the Notes are convertible does not necessarily mean that the selling holders will sell any or all of the Notes or the shares of the common stock into which the Notes are convertible.

The following table sets forth information, as of August 22, 2001, with respect to the selling holders and the principal amounts of Notes beneficially owned by each selling holder that may be offered under this prospectus. The information is based on information provided by or on behalf of the selling holders. The selling holders may offer all, some or none of the Notes or common stock into which the Notes are convertible. Because the selling holders may offer all or some portion of the Notes or the common stock, no estimate can be given as to the amount of the Notes or the common stock that will be held by the selling holders upon termination of any sales. In addition, the selling holders identified below may have sold, transferred or otherwise disposed of all or a portion of their Notes since the date on which they provided the information regarding their Notes in transactions exempt from the registration requirements of the Securities Act.

Selling Holder	Principal Amount of Notes Beneficially Owned and Offered	Conversion
Arbitex Master Fund, L.P	1,200,000	14,284
Black Diamond Offshore, Ltd	665,000	7,915
CALAMOS(R) High Yield Fund - CALAMOS(R) Investment Trust	245,000	2,916
Selling Holder	Principal Amount of Notes Beneficially Owned and Offered	Issuable upon Conversion
Credit Suisse First Boston	1,000,000	11,903
CRT Capital Group, LLC	1,020,000	12,141
Deutsche Bank Securities, Inc.	200,000	2,380
Double Black Diamond Offshore, LDC	2,708,000	32,234
ECT Investments, Inc.	1,000,000	11,903
Faria Fund, Ltd	100,000	1,190
Greenlight Capital, L.P	1,055,000	12,558
Greenlight Capital Offshore, Ltd	2,413,000	28,722
Greenlight Capital Qualified, L.P	2,532,000	30,139
Ilanot Batucha Investment House, Ltd	300,000	3,571
Israel Brokerage & Investments IBI, Ltd	100,000	1,190
Jefferies & Co	875,000	10,415
JMG Capital Partners, L.P	500,000	5,951
JMG Triton Offshore Fund, Ltd	500,000	5,951
JRS, Ltd.	1,000,000	11,903
Julius Baer Securities, Inc	250,000	2,975
KBC Financial Products USA, Inc	900,000	10,713
Lehman Brothers, Inc.	1,200,000	14,284
LibertyView Funds, LLC	100,000	1,190

LibertyView Funds, L.P	400,000	4,761
Lonestar Partners, L.P	2,500,000	29 , 758
Lumber Industries, Inc.	750,000	8,927
Lydian Overseas Partners Master Fund	15,000,000	178,550
McMahan Securities Co., L.P	1,000,000	11,903
Merrill, Lynch, Pierce, Fenner and Smith, Inc	16,000	190

Selling Holder	Principal Amount of Notes Beneficially Owned and Offered	Issuable upon Conversion
Morgan Stanley & Co	2,500,000	29,758
Pacific Life Insurance Company	1,000,000	11,903
Ramus Capital Group Holdings, Ltd	200,000	2,380
Research Capital Corporation	750,000	8 , 927
Spear, Leads & Kellogg Capital Markets	2,400,000	28,568
Standard Mortgage Holding Corp	500,000	5,951
The Class IC Company, Ltd	1,500,000	17,855
United Mizrahi Bank, Ltd	50,000	595
Valentis Investors, LLC	2,000,000	23,806
Ventana Partners, L.P	1,000,000	11,903
Any other holders of Notes or future holders (2)	148,712,000	1,770,185
Total	500,000,000	5,951,673

⁽¹⁾ Assumes a conversion rate of 11.9033 shares of common stock per \$1,000 principal amount of Notes and a cash payment in lieu of any fractional

None of the selling holders nor any of their affiliates, officers, directors or principal equity holders has held any position or office or has had any material

⁽²⁾ Assumes that any other holders of Notes or any future transferees from any holder do not or will not beneficially own any common stock other than common stock into which the Notes are convertible at the conversion rate of 11.9033 shares of common stock per \$1,000 principal amount of Notes. The principal amount of Notes held by other holders or future holders includes \$299,859,000 principal amount of Notes repurchased by the Company as of August 22, 2001 which is convertible into 3,569,325 shares of common stock.

relationship with us within the past three years with the exception of Deutsche Bank Securities, Inc. and Lehman Brothers, Inc. In the past three years, Deutsche Bank, Inc. and Lehman Brothers, Inc. have acted as underwriters of the Company's initial public offering and follow-on public offering and as initial purchasers in the offering of the Notes. The selling holders purchased all of the Notes in a private transaction. All of the Notes and the shares of common stock into which the Notes are convertible are "restricted securities" under the Securities Act.

Information concerning the selling holders may change from time to time and any changed information will be set forth in supplements to this prospectus if and when necessary. In addition, the conversion price, and therefore, the number of shares of common stock issuable upon conversion of the Notes, is subject to adjustment under certain circumstances. Accordingly, the aggregate principal amount of Notes and the number of shares of common stock into which the Notes are convertible may increase or decrease.

The date of this Prospectus Supplement is August 22, 2001.