

PROSPECTUS SUPPLEMENT  
(To prospectus dated August 23, 2000)

[ALEXION LOGO]

\$120,000,000 5-3/4% CONVERTIBLE SUBORDINATED NOTES DUE 2007  
AND 1,127,555 SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THE NOTES

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This document supplements the prospectus dated August 23, 2000 relating to the sale of \$120,000,000 5-3/4% Convertible Subordinated Notes due 2007 and 1,127,555 shares of our common stock issuable upon conversion of the notes. We are not selling any shares; the securityholders named in the prospectus are offering their shares. This prospectus supplement is incorporated by reference into the prospectus.

OUR NASDAQ NATIONAL MARKET TRADING SYMBOL - ALXN

CLOSING PRICE (MARCH 19, 2001): \$22.75

This supplement replaces section entitled "Selling Securityholders" on page 16 with the information described on the following page.

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THE SECURITIES AND EXCHANGE COMMISSION AND STATE SECURITIES REGULATORS HAVE NOT APPROVED OR DISAPPROVED THESE SECURITIES, OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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THE DATE OF THIS PROSPECTUS SUPPLEMENT IS MARCH 20, 2001.

SELLING SECURITYHOLDERS

We originally sold the notes to the initial purchasers on March 3, 2000. The initial purchasers have advised us that they resold the notes in transactions exempt from the registration requirements of the Securities Act of 1933 to "qualified institutional buyers" (as defined in Rule 144A of the Securities Act). These subsequent purchasers, or their transferees, pledgees, donees or successors, may from time to time offer and sell any of the notes and/or shares of our common stock issuable upon conversion of the notes pursuant to this prospectus.

We are registering these notes and shares of common stock pursuant to a registration rights agreement, dated March 3, 2000, between us and the initial purchasers. Under the agreement, we filed the registration statement of which this prospectus is part. We must also keep the registration statement effective until March 8, 2002 or the earlier of (a) the sale pursuant to the registration statement of all the securities registered, (b) the date on which all the securities (x) held by the persons who are not our affiliates may sell such securities under Rule 144(k) or (y) cease to be outstanding or (c) a subsequent shelf registration statement covering all of these securities has been declared effective under the Securities Act.

The following table contains information as of July 25, 2000, unless otherwise noted, with respect to the selling securityholders and the principal amount of notes and the underlying common stock beneficially owned by each selling securityholder that may be offered using this prospectus.

NAME OF SELLING SECURITYHOLDER -----	PRINCIPAL AMOUNT OF NOTES BENEFICIALLY OWNED -----	PERCENTAGE OF NOTES OUTSTANDING -----	NUMBER OF SHARES THAT MAY BE SOLD (1) -----	PERCENTAGE TO COMMON STOCK OUTSTANDING (2) -----
Argent ClassicConvertible Arbitrage Fund (Bermuda) L.P.	\$ 8,300,000	6.9%	77,989	*
BNP Arbitrage SNC	\$ 7,500,000	6.3%	70,472	*
BNP Cooper Neff Convertible Strategies Fund, L.P.	\$ 500,000	*	4,698	*
Calamos Market Neutral Fund Calamos Investment Trust	\$ 1,280,000	1.1%	12,027	*
CIBC World Markets	\$ 1,500,000	1.3%	14,094	*
Consulting Group Capital Market Funds	\$ 340,000	*	3,194	*
Credit Suisse First Boston Corporation	\$14,500,000	12.1%	136,246	*
D. E. Shaw Investments, L.P.	\$ 800,000	*	7,517	*
D. E. Shaw Valence L.P.	\$ 1,200,000	1.0%	11,275	*
Deutsche Bank Securities Inc.	\$ 9,950,000	8.3%	93,493	*

Elf Aquitaine	\$ 250,000	*	2,349	*
Fir Tree Institutional Value Fund, L.P.	\$ 4,569,025	3.8%	42,931	*
Fir Tree Value Fund, L.P.	\$12,212,025	10.2%	114,747	*
Fir Tree Partners, LDC	\$ 1,243,950	1.0%	11,688	*
GLG Partners LP (9)	\$ 5,000,000	4.2%	46,981	*
Highbridge International LLC	\$ 6,000,000	5.0%	56,377	*
JMG Capital Partners, LP	\$ 2,937,000	2.4%	27,596	*
JMG Triton Offshore Fund, Ltd.	\$ 2,938,000	2.4%	27,606	*
J.P. Morgan Securities, Inc.	\$ 280,000	*	2,630	*
Lord Abbette Bond Debenture Fund	\$ 3,750,000	3.1%	35,236	*
McMahon Securities Co. L.P. (7)	\$ 100,000	*	939	*
Museum of Fine Arts, Boston (6)	\$ 27,000	*	253	*
Oxford Lord Abbette & Co.	\$ 1,000,000	*	9,396	*
Parker-Hannifin Corporation (6)	\$ 47,000	*	441	*
Putnam Asset Allocations Funds - Balanced Portfolio (8)	\$ 178,000	*	1,672	*
Putnam Asset Allocations Funds - Conservative Portfolio (8)	\$ 118,000	*	1,108	*
Putnam Balanced Retirement Fund (8)	\$ 55,000	*	516	*
Putnam Convertible Income-Growth Trust (8)	\$ 972,000	*	9,133	*
Putnam Convertible Opportunities and Income Trust (8)	\$ 73,000	*	685	*
R2 Investments, LCD	\$18,600,000	15.5%	174,770	1.2%
Robertson Stephens	\$ 5,000,000	4.2%	46,981	*
University of Rochester (6)	\$ 26,000	*	244	*
Tribeca Investments, LLC	\$ 5,000,000	4.2%	46,981	*

ZCM/HFR Index Management, L.L.C	\$ 120,000	*	1,127	*
Any other holder of Notes or future transferee, pledgee, donee or successor of any holder (3)(4)	\$ 3,634,000	3.0%	34,146	*

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\* Less than 1%.

(1) Assumes conversion of all of the holder's notes at a conversion price of \$106.425 per share of common stock. However, this conversion price will be subject to adjustment as described under "Description of Notes --- Conversion of Notes." As a result, the amount of common stock issuable upon conversion of the notes may increase or decrease in the future.

(2) Calculated based on Rule 13d-3(d)(1)(i) of the Exchange Act using 18,047,193 shares of common stock outstanding as of March 13, 2001. In calculating this amount, we treated as outstanding the number of shares of common stock issuable upon conversion of all of that particular holder's notes. However, we did not assume the conversion of any other holder's notes.

(3) Information about other selling securityholders will be set forth in prospectus supplements, if required.

(4) Assumes that any other holders of notes, or any future transferees, pledgees, donees or successors of or from any such other holders of notes, do not beneficially own any common stock other than the common stock issuable upon conversion of the notes at the initial conversion rate.

(5) Information as of November 14, 2000.

(6) Information as of November 8, 2000.

(7) Information as of March 14, 2001.

(8) Information as of March 15, 2001.

(9) Information as of March 16, 2001

We prepared this table based on the information supplied to us by the selling securityholders named in the table.

The selling securityholders listed in the above table may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act, some or all of their notes since the date on which the information in the above table is presented. Information about the selling securityholders may change over time. Any changed information will be set forth in prospectus supplements.

Because the selling securityholders may offer all or some of the notes and shares of common stock issued upon conversion of the notes, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the notes or shares of common stock that will be held by the selling securityholders after completion of this offering, no estimate can be given as to the principal amount of notes or shares of common stock that will be held by the selling securityholders after completion of this offering. See "Plan of Distribution."