### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-3

### REGISTRATION STATEMENT

Under The Securities Act of 1933

### LATTICE SEMICONDUCTOR CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

93-0835214

(I.R.S. Employer Identification Number)

5555 N.E. Moore Court Hillsboro, Oregon 97124-6421 (503) 268-8000

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Stephen A. Skaggs President Lattice Semiconductor Corporation 5555 N.E. Moore Court Hillsboro, Oregon 97124-6421 (503) 268-8000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

John A. Fore, Esq. Wilson Sonsini Goodrich & Rosati Professional Corporation 650 Page Mill Road Palo Alto, CA 94304 (650) 493-9300

**Approximate date of commencement of proposed sale to the public:** This post-effective amendment deregisters certain shares of common stock that remain unsold hereunder as of the effective date hereof.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

On September 6, 2002, Lattice Semiconductor Corporation (the "Company") filed a registration statement on Form S-3 (No. 333-99249) (the "Registration Statement") which registered 2,489,965 shares of its common stock for resale from time to time. The Registration Statement was declared effective by the Securities and Exchange Commission (the "Commission") on January 6, 2003.

The Registration Statement was filed in order to register for resale (i) 2,370,891 shares of the Company's common stock (the "Cerdelinx Shares") issued to former stockholders, directors and consultants of Cerdelinx Technologies, Inc. ("Cerdelinx"), which was acquired by Lattice on August 26, 2002 and (ii) 119,074 shares of common stock of the Company (the "Bain Shares") issuable to Bain & Company, Inc. ("Bain") upon exercise of a warrant granted to Bain in connection with consulting services provided to the Company.

Based on the records of the Company's transfer agent, of the 2,370,891 Cerdelinx Shares registered under the Registration Statement, the selling stockholders resold an aggregate of 1,720,836 shares under the Registration Statement or Rule 144 of the Securities Act of 1933, as amended.

In accordance with the undertaking contained in the Registration Statement pursuant to item 512(a)(3) of Regulation S-K, the Company respectfully requests that the Commission remove from registration a total of 650,055 Cerdelinx Shares held by former stockholders, directors and consultants of Cerdelinx that remain unsold under the Registration Statement. The Company is requesting the removal from registration of these shares as its obligation to maintain the effectiveness of the Registration Statement with respect to the Cerdelinx Shares pursuant to the registration rights agreements between the Company and former stockholders of Cerdelinx has expired.

Accordingly, the Company hereby de-registers the 650,055 Cerdelinx Shares registered pursuant to the Registration Statement remaining unsold thereunder.

The 119,074 Bain Shares shall continue to be registered under the Registration Statement.

[The remainder of this page is intentionally left blank.]

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Hillsboro, State of Oregon, on February 5, 2004.

#### LATTICE SEMICONDUCTOR CORPORATION

By:	/s/ STEPHEN A. SKAGGS		
	Stephen A. Skaggs President and Secretary		

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Cyrus Y. Tsui and Stephen A. Skaggs, and each of them individually, as his true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents the full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Name	Title	Date	
*	Chief Executive Officer (Principal Executive Officer) and Chairman of the Board	February 5, 2004	
Cyrus Y. Tsui			
/s/ STEPHEN A. SKAGGS	President and Secretary	February 5, 2004	
Stephen A. Skaggs			
/s/ JAN JOHANNESSEN	Corporate Vice President, Chief Financial Officer (Principal Financial and Accounting	February 5, 2004	
Jan Johannessen	Officer) and Assistant Secretary		
*	Director	February 5, 2004	
Mark O. Hatfield			
*	Director	February 5, 2004	
Daniel S. Hauer			
*	Director	February 5, 2004	

*		Director	February 5, 2004
Harry A. M	Ierlo	_	
*		Director	February 5, 2004
Larry W. S	onsini	_	
*By:	/s/ STEPHEN A. SKAGGS		
	Stephen A. Skaggs Attorney-In-Fact		

## QuickLinks

Soo Boon Koh

DEREGISTRATION OF SECURITIES SIGNATURES