UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 2 TO SCHEDULE TO (Rule 14d-100)

Tender Offer Statement Under Section 14(d)(1) or 13(e)(1) of the Securities Exchange Act of 1934

Siliconix incorporated

(Name of subject company (issuer))

Vishay Intertechnology, Inc. and Vishay TEMIC Semiconductor Acquisition Holdings Corp.

(Offerors)

(Names of filing persons (identifying status as offeror, issuer or other person))

Common Stock, Par Value \$0.01 per Share (Title of class of securities)

82707920 3

(CUSIP numbers of class of securities)

Richard N. Grubb Vishay Intertechnology, Inc. 63 Lincoln Highway Malvern, Pennsylvania 19355-2143 (610) 644-1300

(Name, address and telephone number of persons authorized to receive notices and communications on behalf of filing persons)

Copies To:

Avner Z. Lahat, Esq. Vishay Intertechnology, Inc. 63 Lincoln Highway Malvern, Pennsylvania 19355-2143 (610) 644-1300 Abbe L. Dienstag, Esq. Kramer Levin Naftalis & Frankel LLP 1177 Avenue of the Americas New York, New York 10036 (212) 715-9100

CALCULATION OF FILING FEE

 Transaction Valuation*
 Amount of Filing Fee**

 \$189,157,954
 \$22,263.89

^{*} Calculated solely for the purpose of determining the filing fee, based on the product of (i) 32.34, the average of the high and low sales prices of Siliconix common stock on the NASDAQ National Market on April 21, 2005 and (ii) 5,849,040, the expected maximum number of shares of Siliconix common stock to be acquired in the offer and the merger.

^{**} The amount of the filing fee was calculated in accordance with Rules 0-11(a)(2) and (a)(4) of the Securities Exchange Act of 1934, as amended, and equals \$117.70 for each \$1,000,000 of the value of the transaction.

Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: \$23,327.52 Filing Party: Vishay Intertechnology, Inc.

Form or Registration No.: Form S-4 Date Filed: April 12, 2005

O Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- ⊠ third-party tender offer subject to Rule 14d-l.
- o issuer tender offer subject to Rule 13e-4.
- o going-private transaction subject to Rule 13e-3.
- ⊠ amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer: o

This Amendment to the Tender Offer Statement on Schedule TO is filed by Vishay Intertechnology, Inc. and Vishay TEMIC Semiconductor Acquisition Holdings Corp., a wholly owned subsidiary of Vishay. The Schedule TO relates to the offer by Vishay TEMIC to exchange shares of Vishay common stock, par value \$0.10 per share, for each outstanding share of common stock, par value \$0.01 per share, of Siliconix incorporated that Vishay and its subsidiaries do not own. As announced by Vishay on April 21, 2005, Vishay has increased the exchange ratio in the offer to 3.075 shares of Vishay common stock for each share of Siliconix common stock. The offer is being made upon the terms and subject to the conditions set forth in the amended prospectus of Vishay, dated April 25, 2005, and in the related letter of transmittal, copies of which are incorporated by reference herein as Exhibits (a)(1) and (a)(2), respectively.

Items 1 through 11.

The information set forth in the prospectus and the letter of transmittal is incorporated by reference herein with respect to Items 1 through 11 of this Schedule TO.

Item 12. Exhibits.

Exhibit Number	Description
(a)(1)	Prospectus dated April 25, 2005 (incorporated by reference from Amendment No. 1, dated April 25, 2005 (the "Form S-4/A") to Vishay's original registration statement on Form S-4 filed on April 12, 2005 (the "Form S-4").
(a)(2)	Letter of Transmittal (incorporated by reference to Exhibit 99.1 to the Form S-4/A).
(a)(3)	Form of Notice of Guaranteed Delivery (incorporated by reference to Exhibit 99.2 to the Form S-4).
(a)(4)	Form of Letter from Vishay TEMIC to Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees (incorporated by reference to Exhibit 99.3 to the Form S-4).
(a)(5)	Form of Letter from Brokers, Dealers, Commercial Banks, Trust Companies and Other Nominees to Clients (incorporated by reference to Exhibit 99.4 to the Form S-4).
(a)(6)	Form of Guidelines for Certification of Taxpayer Identification Number on Substitute Form W-9 (incorporated by reference to Exhibit 99.5 to the Form S-4).
(a)(7)	Request from Vishay TEMIC for stockholder list of Siliconix (incorporated by reference to Exhibit 99.6 to the Form S-4).
Exhibits (a)(8)(i)—(a)(8)(xvi) are complaints and decisions relating to the 2001 tender offer of Vishay Intertechnology, Inc. and Vishay TEMIC Semiconductor Acquisition Holdings Corp. for Siliconix incorporated shares.	
(a)(8)(i)	Complaint titled Robert C. Dickenson v. Vishay Intertechnology, Inc., Vishay TEMIC Semiconductor Acquisition Holdings Corp., Siliconix incorporated, King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg and Glyndwr Smith, filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.8 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).

- (a)(8)(ii) Complaint titled Moshe Miller v. King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg, Mark Segall, Glyndwr Smith, Siliconix incorporated and Vishay Intertechnology, Inc., filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.9 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(iii) Complaint titled Mathew Delaney v. Vishay Intertechnology, Inc., Vishay TEMIC Semiconductor Acquisition Holdings Corp., Siliconix incorporated, King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg and Glyndwr Smith, filed on February 23, 2001, in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.10 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(iv) Complaint titled Steven Goldstein v. Siliconix incorporated, Vishay Intertechnology, Inc., Michael A. Rosenberg, Mark B. Segall, King Owyang Ph.D., Everett Arndt, Lori Lipcaman and Glyndwr Smith, filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.11 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(v) Complaint titled Goldplate Investment Partners v. King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg, Mark Segall, Glyndwr Smith, Siliconix incorporated and Vishay Intertechnology, Inc., filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.12 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(vi) Complaint titled Barry Feldman v. Michael Rosenberg, Mark B. Segall, King Owyang, Everett Arndt, Lori Lipcaman, Glyndwr Smith, Vishay Intertechnology, Inc. and Siliconix incorporated, filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.13 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(vii) Complaint titled Robert Mullin v. Vishay Intertechnology, Inc., Vishay TEMIC Semiconductor Acquisition Holdings Corp., Siliconix incorporated, King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg and Glyndwr Smith, filed on February 23, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.14 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(viii) Complaint titled Mohammed Yassin v. King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg, Mark Segall, Glyndwr Smith, Siliconix incorporated and Vishay Intertechnology, Inc., filed on February 26, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.15 to Vishay Intertechnology, Inc's registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(ix) Complaint titled Griffin Portfolio Management Corp. v. Siliconix incorporated, Vishay Intertechnology, Inc., Michael Rosenberg, Mark B. Segall, King Owyang Ph.D., Everett Arndt, Lori Lipcaman and Glyndwr Smith, filed on February 27, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.16 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).

- (a)(8)(x) Complaint titled Jonathan Rex v. King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg, Mark Segall, Glyndwr Smith, Vishay Intertechnology, Inc., Felix Zandman, Avi Eden, Gerald Paul, Richard N. Grubb, Robert A. Freece, Eliyahu Hurvitz, Edward B. Shils, Luella B. Slaner, Mark I. Solomon, Jean-Claude-Tine and Does 1 through 100, Inclusive, filed on February 23, 2001 in the State Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.17 to Vishay Intertechnology, Inc's registration statement on Form S-4 filed on May 25, 2001).
 (a)(8)(xi) Complaint titled Crandon Capital Partners v. King Owyang, Everett Arndt, Lori Lipcaman, Michael Rosenberg, Mark Segall, Glyndwr Smith, Siliconix incorporated and Vishay Intertechnology, Inc. and Does 1 through 100, Inclusive, filed on February 27, 2001 in the State Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.18 to Vishay Intertechnology, Inc.'s registration statement on Form S-4 filed on May 25, 2001).
- (a)(8)(xii) Complaint titled Raymond L. Fitzgerald v. Vishay Intertechnology, Inc., Everett Arndt, Lori Lipcaman, King Owyang, Michael Rosenberg, Mark Segall, Glyndwr Smith and Siliconix incorporated, filed on March 8, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.19 to Vishay Intertechnology, Inc.'s registration statement of Form S-4 filed on May 25, 2001).
- (a)(8)(xiii) Verified Amended Complaint titled In Re Siliconix incorporated Shareholders Litigation, filed on May 31, 2001 in the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.21 to Vishay Intertechnology, Inc.'s registration statement on Amendment No. 2 to Form S-4 filed on June 6, 2001).
- (a)(8)(xiv) Memorandum Opinion In Re Siliconix incorporated Shareholders Litigation ordered on June 19, 2001 by the Chancery Court of the State of Delaware, County of New Castle (incorporated by reference to Exhibit 99.22 to Vishay Intertechnology, Inc.'s registration statement on Amendment No. 3 to Form S-4 filed on June 21, 2001).
- (a)(8)(xv) Stipulation and Order of Dismissal filed on December 18, 2002 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.7.15 to the Form S-4).
- (a)(8)(xvi) Order Dismissing Action Without Prejudice filed on January 16, 2003 in Superior Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.7.16 to the Form S-4).
- (a)(9)(i) Complaint titled Rebecca Proctor, Rex Brooks, John Donovan, Robert Needles et al., v. Vishay Intertechnology, Inc., Vishay TEMIC Semiconductor Acquisition Holdings Corporation, Siliconix, Inc., Ernst & Young, Felix D. Zandman, and Doe 1 through Doe 20, inclusive, filed on January 10, 2005 in the Superior Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.8.1 to the Form S-4).
- (a)(9)(ii) Notice of Demurrer and Demurrer to Class Action Claim, Notice of Motion and Motion to Strike Portions of the Amended Complaint, and Notice of Motion and Motion to Dismiss for Failure to Prosecute, in the action titled Rebecca Proctor, Rex Brooks, John Donovan, Robert Needles et al., v. Vishay Intertechnology, Inc., Vishay Temic Semiconductor Acquisition Holdings Corporation, Siliconix, Inc., Ernst & Young, Felix D. Zandman, and Doe 1 through Doe 20, inclusive, filed on April 1, 2005 in the Superior Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.8.2 to the Form S-4/A).

(a)(9)(iii) Memorandum of Points and Authorities in Support of the Vishay Defendant's Demurrer to Class Action Claim, Motion to Strike Portions of the Amended Complaint and Motion to Dismiss for Failure to Prosecute, in the action titled Rebecca Proctor, Rex Brooks, John Donovan, Robert Needles et al., v. Vishay Intertechnology, Inc., Vishay Temic Semiconductor Acquisition Holdings Corporation, Siliconix, Inc., Ernst & Young, Felix D. Zandman, and Doe 1 through Doe 20, inclusive, filed on April 1, 2005 in the Superior Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.8.3 to the Form S-4/A).

Exhibits (a)(10)(i)—(a)(10)(viii) are complaints relating to the 2005 tender offer of Vishay Intertechnology, Inc. and Vishay TEMIC Semiconductor Acquisition Holdings Corp. for Siliconix incorporated shares.

- (a)(10)(i) Complaint titled Paulena Partners, LLC, v. Siliconix Inc., King Owyang, Hanspeter Eberhardt, Glyndwr Smith, Timothy V. Talbert, Thomas C. Werthelmer, and Vishay Intertechnology, Inc., filed on March 4, 2005 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.9.1 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(ii) Complaint titled Nathan Withington III, IRA, v. Siliconix Incorporated, Vishay Intertechnology, Inc., Hanspeter Eberhardt, King Owyang, Glyndwr Smith, Timothy V. Talbert, and Thomas C. Wertheimer, filed on March 4, 2005 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.9.2 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(iii) Complaint titled Olga Fried v. King Owyang, Hanspeter Eberhardt, Thomas C. Wertheimer, Glyndwr Smith, Timothy V. Talbert, Vishay Intertechnologies, Inc. and Siliconx, Inc., filed on March 4, 2005 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.9.3 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(iv) Complaint titled J. Douglas Zaletel, v. King Owyang, Hanspeter Eberhardt, Glyndwr Smith, Timothy V. Talbert, Thomas C. Wertheimer, Siliconix, Inc., and Vishay Intertechnology, Inc., filed on March 4, 2005 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.9.4 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(v) Complaint titled Steven Goldstein v. Siliconix incorporated, King Owyang, Timothy V. Talbert, Hanspeter Eberhardt, Thomas C. Wertheimer, Glyndwr Smith, and Vishay Intertechnology, Inc., filed on March 4, 2005 in the Court of Chancery of the State of Delaware (incorporated by reference to Exhibit 99.9.5 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(vi) Complaint titled Moe Yassin v. Siliconix, Inc., Timothy V. Talbert, Thomas C. Wertheimer, Hanspeter Eberhardt, Dr. King Owyang, and Glyndwr Smith, and Vishay Intertechnology, Inc., filed on March 4, 2005 in the Superior Court of Chancery of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.9.6 to Vishay Intertechnology, Inc.'s Form S-4 filed on April 12, 2005).
- (a)(10)(vii) Consolidated Amended Class Action Complaint, titled In Re: Siliconix, Inc. Shareholders Litigation, filed on April 18, 2005, in the Court of Chancery of the State of Delaware, New Castle County (incorporated by reference to Exhibit 99.9.7 to the Form S-4/A).

(a)(10)(viii)	First Amended Complaint titled Moe Yassin v. Siliconix, Inc., Timothy V. Talbert, Thomas C. Wertheimer, Hanspeter Eberhardt, Dr. King Owyang, and Glyndwr Smith, and Vishay Intertechnology, Inc., filed on April 22, 2005 in the Superior Court of the State of California, County of Santa Clara (incorporated by reference to Exhibit 99.9.8 to the Form S-4/A).
(a)(11)	Press release of Vishay announcing its intention to commence the offer, dated March 3, 2005 (incorporated by reference to Exhibit 99.1 to our current report on Form 8-K filed on March 4, 2005).
(a)(12)	Press release of Vishay announcing commencement of the offer, dated April 12, 2005 (incorporated by reference to Exhibit 99.11 to the Form S-4).
(a)(13)*	Press release of Vishay announcing increase in exchange ratio in the offer and settlement in principle of litigation in Delaware related to the offer, dated April 21, 2005.
(a)(14)	Press release of Vishay noting development in shareholder litigation relating to pending Siliconix offer, dated April 25, 2005 (incorporated by reference to Exhibit 99.13 to the Form S-4/A).
(a)(15)	Letter to stockholders of Siliconix, dated April 25, 2005 (incorporated by reference to Exhibit 99.14 to the Form S-4/A).
(b)	None.
(d)	None.
(g)	None.
(h)	None.

Item 13. Information Required by Schedule 13E-3.

Not applicable.

* Previously filed

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: April 25, 2005

VISHAY INTERTECHNOLOGY, INC

By:

/s/ RICHARD N. GRUBB

Name: Richard N. Grubb

Title: Executive Vice President, Treasurer and

Chief Financial Officer

VISHAY TEMIC SEMICONDUCTOR ACQUISITION HOLDINGS CORP.

By:

/s/ RICHARD N. GRUBB

Name: Richard N. Grubb Title: Vice President and Treasurer

7

QuickLinks

<u>SIGNATURE</u>