

Jeffrey D. Jones

Vice President, Finance and Chief Financial Officer

Cohu, Inc.

12367 Crosthwaite Circle, Poway, California 92064

*(Name and address of agent for service)***(858) 848-8100***(Telephone number, including area code, of agent for service)*

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered (1)	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2) (3)	Proposed Maximum Aggregate Offering Price (2) (3)	Amount of Registration Fee
Common Stock, \$1.00 par value, under the amended Coahu, Inc. 2005 Equity Incentive Plan	1,500,000	\$9.39	\$14,085,000	\$1,636.68
Common Stock, \$1.00 par value, under the amended and restated Coahu, Inc. 1997 Employee Stock Purchase Plan	750,000	\$7.99	\$ 5,992,500	\$ 696.33
Total:	2,250,000		\$20,077,500	\$2,333.01

(1) Pursuant to Rule 416(a), this Registration Statement also covers any additional securities that may be offered or issued as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of determining the registration fee and calculated pursuant to Rule 457(c) and 457(h)(1) of the Securities Act of 1933. The maximum offering price per share is based upon the average of the high

and low selling prices per share of Cohu, Inc. Common Stock on September 11, 2015, as reported on the NASDAQ Global Select Market.

(3) Estimated solely for the purpose of determining the registration fee and calculated pursuant to Rule 457(c) and 457(h)(1) of the Securities Act of 1933. The maximum offering price per share is based upon 85% of the average of the high and low selling prices per share of Cohu, Inc. Common Stock on September 11, 2015, as reported on the NASDAQ Global Select Market. Pursuant to the Cohu, Inc. 1997 Employee Stock Purchase Plan, the purchase price of a share of the Registrant's common stock shall be an amount equal to 85% of the fair market value of a share of common stock, calculated pursuant to such plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The documents containing the information specified in this Part I will be sent or given to employees, officers, directors or others as specified by Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act"). In accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission") and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplement pursuant to Rule 424 of the Securities Act. Such documents and the documents incorporated by reference in this registration statement pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

Cohu, Inc. (the "Company") hereby incorporates by reference in this Registration Statement the following documents:

(a) The Company's latest Annual Report on Form 10-K filed on February 24, 2015 pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), containing audited financial statements for the Company's fiscal year ended December 27, 2014.

(b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.

(c) The description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not applicable

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Delaware law authorizes corporations to eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breach or alleged breach of the directors' "duty of care". While the relevant statute does not change directors' duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. The statute has no effect on directors' duty of loyalty, acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, illegal payment of dividends and approval of any transaction from which a director derives an improper personal benefit.

The Company has adopted provisions in its Amended and Restated Certificate of Incorporation, as amended, which eliminate the personal liability of its directors to the Company and its stockholders for monetary damages for breach or alleged breach of their duty of care. The bylaws of the Company provide for indemnification of its directors, officers, employees and agents to the fullest extent permitted by the General Corporation Law of the State of Delaware, the Company's state of incorporation, including those circumstances in which indemnification would otherwise be discretionary under Delaware Law. Section 145 of the General Corporation Law of the State of Delaware permits a corporation to indemnify any director or officer of the corporation against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with any action, suit, or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reason to believe his or her conduct was unlawful. In a derivative action, or an action brought by or on behalf of the corporation, indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine that the defendant is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

The Company has entered into indemnification agreements with certain of its executive officers and directors, indemnifying them against certain potential liabilities that may arise as a result of their service to the Company, and providing certain other protections. The Company also maintains insurance policies which insure the officers and directors against certain liabilities.

Item 7. Exemption From Registration Claimed

Not applicable.

Item 8. Exhibits

See Exhibit Index attached hereto, which is incorporated into this Item 8 by reference.

Item 9. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement.

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-8 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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 registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Poway, State of California, on September 18, 2015.

COHU, INC.

By: /s/ Luis A. Müller
Luis A. Müller
President and Chief Executive
Officer

POWER OF ATTORNEY

The officers and directors of Cohu, Inc. whose signatures appear below, hereby constitute and appoint Luis A. Müller and Jeffrey D. Jones, and each of them, their true and lawful attorneys and agents, with full power of substitution, each with power to act alone, to sign and execute on behalf of the undersigned any amendment or amendments to this Registration Statement on Form S-8, and each of the undersigned does hereby ratify and confirm all that each of said attorney and agent, or their, her or his substitutes, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Luis A. Müller Luis A. Müller	President, Chief Executive Officer and Director (Principal Executive Officer)	September 18, 2015
/s/ Jeffrey D. Jones Jeffrey D. Jones	Vice President, Finance and Chief Financial Officer, (Principal Financial and Accounting Officer)	September 18, 2015
/s/ James A. Donahue James A. Donahue	Executive Chairman	September 18, 2015
/s/ William E. Bendush William E. Bendush	Director	September 18, 2015
/s/ Steven J. Bilodeau Steven J. Bilodeau	Director	September 18, 2015
/s/ Andrew M. Caggia Andrew M. Caggia	Director	September 18, 2015
/s/ Robert L. Ciardella Robert L. Ciardella	Director	September 18, 2015
/s/ Karl H. Funke Karl H. Funke	Director	September 18, 2015

EXHIBIT INDEX

Exhibit No.	<u>Description</u>
4.1	Amended and Restated Certificate of Incorporation of Cohu, Inc. incorporated herein by reference to Exhibit 3.1(a) from the Cohu, Inc. Form 10-Q for the quarterly period ended June 30, 1999.
4.1(a)	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Cohu, Inc. incorporated herein by reference to Exhibit 4.1(a) from the Cohu, Inc. Form S-8 filed with the Securities and Exchange Commission on June 30, 2000.
4.2	Amended and Restated Bylaws of Cohu, Inc. incorporated herein by reference to Exhibit 3.2 from the Cohu, Inc. Report on Form 8-K filed with the Securities and Exchange Commission on December 12, 1996.
5.1	Opinion regarding legality.
23.1	Consent of Counsel (included in Exhibit 5.1).
23.2	Consent of Independent Registered Public Accounting Firm.
24	Power of Attorney (included in signature page to this Registration Statement).
99.1	Cohu, Inc. 2005 Equity Incentive Plan, as amended, incorporated by reference to Exhibit 10.1 from the Cohu, Inc. Report on Form 8-K filed with the Securities and Exchange Commission on May 13, 2015.
99.2	Cohu, Inc. 1997 Employee Stock Purchase Plan, as amended and restated, incorporated by reference to Exhibit 10.2 from the Cohu, Inc. Report on Form 8-K filed with the Securities and Exchange Commission on May 13, 2015.