

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM S-8

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

ADVANCED ENERGY INDUSTRIES, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

84-0846841
(I.R.S. Employer
Identification No.)

1625 Sharp Point Drive
Fort Collins, Colorado
(Address of Principal Executive Offices)

80525
(Zip Code)

ADVANCED ENERGY INDUSTRIES, INC. 2017 OMNIBUS INCENTIVE PLAN
(Full Title of the Plan)

Thomas O. McGimpsey
Executive Vice President and General Counsel
Advanced Energy Industries, Inc.
1625 Sharp Point Drive
Fort Collins, Colorado 80525
(Name and Address of Agent for Service)
(970) 221-4670
(Telephone Number, Including Area Code, of Agent of Service)

Copy to:
Patrick G. Quick, Esq.
Thomas B. Spillane, Esq.
Foley & Lardner LLP
777 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-5306
(414) 271-2400

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company
(Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

	Title Of Securities To Be Registered	Amount To Be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount Of Registration Fee
	Common Stock, par value \$0.001 per share	2,500,000	\$82.22	\$205,550,000	\$25,591

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate number of additional shares of Common Stock that may become issuable in accordance with the adjustment and anti-dilution provisions of the Advanced Energy Industries, Inc. 2017 Omnibus Incentive Plan.
- (2) Calculated pursuant to Rule 457(c) and (h) under the Securities Act on the basis of \$82.22 per share, which was the average of the high and low prices of the Company's Common Stock as reported on the NASDAQ Global Select Market on November 2, 2017.

PART I

INCORPORATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents constituting Part I of this Registration Statement will be sent or given to the participants in the Advanced Energy Industries, Inc. 2017 Omnibus Incentive Plan as required by Rule 428(b)(1) under the Securities Act of 1933, as amended.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed by Advanced Energy Industries, Inc. (the “Company”) with the Securities and Exchange Commission (the “Commission”) pursuant to the Securities Exchange Act of 1934, as amended (the “Exchange Act”) are incorporated herein by reference and deemed to be a part hereof:

- (a) [the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Commission on February 24, 2017;](#)
the Company’s Quarterly Reports on Form 10-Q [for the quarterly period ended March 31, 2017 filed with the Commission on May 1, 2017, for the quarterly period ended June 30, 2017 filed with the Commission on July 31, 2017,](#) and [for the quarterly period ended September 30, 2017 filed with the Commission on October 31, 2017;](#)
- (b) the Company’s Current Reports on Form 8-K [dated May 4, 2017 and filed with the Commission on May 4, 2017, dated July 31, 2017 and filed with the Commission on July 31, 2017, dated November 1, 2017 and filed with the Commission on November 6, 2017;](#) and
- (c) the description of the Common Stock, par value \$0.001 per share of the Company contained in the Company’s Registration Statement on Form 8-A, filed with the Commission on October 12, 1995, 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 or 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 herein or in a document, all or a portion of which is 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 other subsequently filed document which also is or 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 amended, 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 General Corporation Law. Section 145(a) of the General Corporation Law of the State of Delaware (the “Delaware General Corporation Law”) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person’s conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that

the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law states that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which the person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

Section 145(c) of the Delaware General Corporation Law provides that to the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 145(g) of the Delaware General Corporation Law provides that a corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of Section 145 of the Delaware General Corporation Law.

Certificate of Incorporation. As permitted by the Delaware General Corporation Law, the Company's Restated Certificate of Incorporation provides that no director of the Company shall be personally liable to the Company or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability: (i) for any breach of the duty of loyalty to the Company or its stockholders; (ii) for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of the law; (iii) arising from payment of dividends or approval of a stock purchase in violation of Section 174 of the Delaware General Corporation Law; or (iv) for any transaction from which the director derived an improper personal benefit. While the Restated Certificate of Incorporation provides protection from awards for monetary damages for breaches of the duty of care, it does not eliminate the director's duty of care. Accordingly, the Restated Certificate of Incorporation will not affect the availability of equitable remedies, such as an injunction, based on a director's breach of the duty of care. The provisions of the Restated Certificate of Incorporation described above apply to the Company's officers only if they are also directors acting in their capacity as directors, and does not apply to officers who are not directors.

Bylaws. The Company's bylaws provide that the Company shall indemnify our directors and executive officers ("executive officers" shall have the meaning defined in Rule 3b-7 under the Exchange Act) to the fullest extent not prohibited by the Delaware General Corporation Law; provided, however, that the Company may modify the extent of such indemnification by individual contracts with its executive officers and directors; and, provided further, that the Company shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless: (i) such indemnification is expressly required to be made by law; (ii) the proceeding was authorized by the Company's board of directors; (iii) such indemnification is provided by the Company, in its sole discretion, pursuant to the powers vested in the Company under the Delaware General Corporation Law; or (iv) such indemnification is required to be made under Article XI, Section 43, Subsection (d) of the Company's bylaws.

Insurance. We maintain a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances.

Item 7. Exemption from Registration Claimed

Not applicable.

Item 8. Exhibits

The exhibits filed herewith or incorporated herein by reference are set forth in the accompanying Exhibit Index.

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 the 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 the 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; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section 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; and

(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.

(4) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, in a primary offering of securities of the Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the Registrant relating to the offering required to be filed pursuant to Rule 424 under the Securities Act of 1933;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the Registrant or used or referred to by the Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the Registrant or its securities provided by or on behalf of the Registrant; and

(iv) Any other communication that is an offer in the offering made by the Registrant to the purchaser.

(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 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered herein, 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.

**EXHIBIT INDEX
TO
REGISTRATION STATEMENT ON FORM S-8**

Exhibit Number	Description
<u>4.1</u>	<u>Advanced Energy Industries, Inc. 2017 Omnibus Incentive Plan (incorporated by reference to Appendix A to the Company's definitive proxy statement filed with the Securities and Exchange Commission on Schedule 14A on March 14, 2017)</u>
<u>4.2</u>	<u>Restated Certificate of Incorporation of Advanced Energy Industries, Inc., as amended (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2003 filed with the Securities and Exchange Commission on November 4, 2003)</u>
<u>4.3</u>	<u>Amended and Restated Bylaws of Advanced Energy Industries, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 filed with the Securities and Exchange Commission on August 6, 2013)</u>
<u>5</u>	<u>Opinion of Foley & Lardner LLP</u>
<u>23.1</u>	<u>Consent of Grant Thornton LLP</u>
<u>23.2</u>	<u>Consent of Foley & Lardner LLP (included in Exhibit 5)</u>
<u>24</u>	<u>Power of Attorney (included in this Registration Statement under "Signatures")</u>

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 Fort Collins, State of Colorado, on November 6, 2017.

ADVANCED ENERGY INDUSTRIES, INC.

By: /s/ Thomas O. McGimpsey

Thomas O. McGimpsey

Executive Vice President & General Counsel

Each person whose signature appears below constitutes and appoints Thomas O. McGimpsey and Steven Mason, and each of them individually, his true and lawful attorney-in-fact and agent, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) or supplements to this Registration Statement, 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, and each of them individually, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them individually, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Yuval Wasserman</u> Yuval Wasserman	Chief Executive Officer, President & Director (Principal Executive Officer)	November 6, 2017
<u>/s/ Thomas Liguori</u> Thomas Liguori	EVP & Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 6, 2017
<u>/s/ Grant H. Beard</u> Grant H. Beard	Chairman of the Board	November 6, 2017
<u>/s/ Frederick A. Ball</u> Frederick A. Ball	Director	November 6, 2017
<u>/s/ Edward C. Grady</u> Edward C. Grady	Director	November 6, 2017
<u>/s/ Thomas M. Rohrs</u> Thomas M. Rohrs	Director	November 6, 2017
<u>/s/ Ronald C. Foster</u> Ronald C. Foster	Director	November 6, 2017
<u>/s/ John A. Roush</u> John A. Roush	Director	November 6, 2017



ATTORNEYS AT LAW
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Milwaukee, WI 53202-5306
414.271.2400 TEL
414.297.4900 FAX
www.foley.com

CLIENT/MATTER NUMBER
115859-0101

November 6, 2017

Advanced Energy Industries, Inc.
1625 Sharp Point Drive
Fort Collins, CO 80525

Ladies and Gentlemen:

We have acted as counsel for Advanced Energy Industries, Inc., a Delaware corporation (the “Company”), in conjunction with the preparation of a Registration Statement on Form S-8 (the “Registration Statement”) to be filed by the Company with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the “Securities Act”), relating to 2,500,000 shares (the “Registered Shares”) of the Company’s common stock, par value \$0.001 per share (“Common Stock”), that may be issued pursuant to the Advanced Energy Industries, Inc. 2017 Omnibus Incentive Plan (the “2017 Plan”).

In connection with our representation, we have examined: (a) the 2017 Plan and related documents; (b) the Registration Statement, including the exhibits (including those incorporated by reference) constituting a part of the Registration Statement; (c) the Certificate of Incorporation of the Company and the By-Laws of the Company, as amended to date; (d) the resolutions of the Company’s Board of Directors relating to the 2017 Plan and the issuance of Common Stock thereunder; and (e) such other corporate proceedings, documents and records as we have deemed necessary or appropriate to enable us to render this opinion.

In our examination of the above-referenced documents, we have assumed the genuineness of all signatures, the authenticity of all documents, certificates and instruments submitted to us as originals and the conformity with the originals of all documents submitted to us as copies.

Based on the foregoing, we are of the opinion that the Registered Shares, if and when issued by the Company pursuant to the terms and conditions of the 2017 Plan and as contemplated by the Registration Statement, will be legally issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement. In giving our consent, we do not admit that we are “experts” within the meaning of Section 11 of the Securities Act or within the category of persons whose consent is required by Section 7 of the Securities Act.

Very truly yours,

/s/ Foley & Lardner LLP

Foley & Lardner LLP

Boston
Brussels
CHICAGO
Detroit

JACKSONVILLE
LOS ANGELES
MADISON
MIAMI

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SAN FRANCISCO
SHANGHAI
SILICON VALLEY

TALLAHASSEE
TAMPA
TOKYO
WASHINGTON, D.C.

Consent of Independent Registered Public Accounting Firm

We have issued our reports dated February 23, 2017, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of Advanced Energy Industries, Inc. on Form 10-K for the year ended December 31, 2016. We consent to the incorporation by reference in the Registration Statement of the aforementioned reports.

/s/ GRANT THORNTON LLP

Denver, CO
November 6, 2017