

Enphase Energy, Inc.  
Form 10-K  
March 04, 2014  
Table of Contents

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

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2013

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number: 001-35480

Enphase Energy, Inc.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

20-4645388  
(I.R.S. Employer  
Identification No.)

1420 N. McDowell Blvd  
Petaluma, CA 94954  
(Address of principal executive offices) (Zip Code)  
(707) 774-7000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class:	Name of each exchange on which registered
Common Stock, par value \$0.00001 per share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements

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incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in

Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the registrant on June 30, 2013, based upon the closing price of \$7.73 of the registrant's common stock as reported on the NASDAQ Global Market, was approximately 113.1 million. Excludes approximately 27.1 million shares of the registrant's common stock held by current executive officers, directors, and holders of five percent or more of the outstanding common stock in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 28, 2014, there were 42,236,859 shares of the registrant's common stock outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

Certain information called for by Part III of this Form 10-K is incorporated by reference to the Proxy Statement for the registrant's 2014 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2013.

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Table of Contents

PART I

This Annual Report on Form 10-K contains “forward-looking statements” as defined under securities laws.

Forward-looking statements include statements that are not historical facts and can be identified by terms such as “anticipates,” “believes,” “could,” “seeks,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “would” or similar expressions and the negatives of those terms. These forward-looking statements are contained principally in Item 1, Business; Item 1A, Risk Factors; Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations; and other sections of this Annual Report on Form 10-K. Our actual results or experience could differ significantly from the forward-looking statements. Factors that could cause or contribute to these differences include those discussed in Item 1A, Risk Factors, as well as those discussed elsewhere in this Annual Report on Form 10-K.

Forward-looking statements are inherently uncertain and you should not place undue reliance on these statements, which speak only as of the date that they were made. These cautionary statements should be considered in connection with any written or oral forward-looking statements that we may issue in the future. We do not undertake any obligation to release publicly any revisions to these forward-looking statements after completion of the filing of this Annual Report on Form 10-K to reflect later events or circumstances or to reflect the occurrence of unanticipated events.

In this report, unless otherwise indicated or the context otherwise requires, “Enphase Energy,” “Enphase,” “the Company,” “we,” “us,” and “our” refer to Enphase Energy, Inc., a Delaware corporation, and its subsidiaries.

Item 1. Business

Our Company

We deliver microinverter technology for the solar industry that increases energy production, simplifies design and installation, improves system uptime and reliability, reduces fire safety risk and provides a platform for intelligent energy management. Our semiconductor-based microinverter system converts direct current (DC) electricity to alternating current (AC) electricity at the individual solar module level, and brings a system-based, high technology approach to solar energy generation leveraging our design expertise across power electronics, semiconductors, networking and embedded and web-based software technologies. We are the market leader in the microinverter category and have grown rapidly. Since our first commercial shipment in mid-2008, we have sold approximately 4.7 million microinverters as of December 31, 2013, which represents over 1.2 gigawatt (DC). We were the first company to commercially ship microinverter systems in volume. We currently offer microinverter systems targeting the residential and commercial markets in the United States, Canada, the United Kingdom, France, the Benelux region, certain other European markets and Australia.

We were incorporated as PVI Solutions, Inc. in March 2006 in the State of Delaware and changed our name to Enphase Energy, Inc. in July 2007.

Industry Background

Historically, traditional central inverters have been the only inverter technology used for solar photovoltaic, or PV installations. In an installation consisting of a traditional central inverter, the solar PV modules are connected in series strings. In a large installation, there are multiple series strings connected in parallel. The aggregated voltage from each of these strings is then fed into a large central inverter. As compared to microinverter systems, we believe that traditional central inverters have a number of design and performance challenges limiting innovation and their ability to reduce the cost of solar systems, including the following:

Productivity limits. If solar modules are wired using a traditional central inverter—group or “string” of modules are wired in series—an entire string’s output is limited by the output of the lowest-performing module. Because of its string design, there is a single point of failure risk with the traditional central inverter approach.

Reliability issues. Traditional central inverters are the single most common component of solar installations to fail, resulting in system downtime and adversely impacting total energy output. As a result, central inverters typically carry warranties of only 5 to 10 years.

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Complex design and installation requirements. The central inverter-based solar PV installation requires greater effort on the part of the installer, both in terms of design and on-site labor. Central inverter installations require string design and calculations for safe and reliable operation, as well as specialized equipment such as DC combiners, conduits and disconnects. In addition, the use of high-voltage DC requires specialized knowledge and training and safety precautions to install central inverter technology.

2

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## Table of Contents

Lack of monitoring. The majority of solar installations with central inverter technology offer limited monitoring capabilities. A failure of the central inverter will often go unnoticed for days or even weeks. If a module fails or is not performing to specification, the resulting loss of energy can go unnoticed for an extended period of time.

Safety issues. Central inverter solar PV installations have a wide distribution of high-voltage (600 volts in the United States and 1,000 volts in Europe) DC wiring. If damaged, DC wires can generate sustained electrical arcs, reaching temperatures of more than 5,000 °F. This creates the risk of fire for solar PV installation owners and injury for installers and maintenance personnel.

These challenges of traditional central inverters have a direct impact on the cost and expected return on investment of solar installations to both installers and system owners:

Installer. Solar PV installers aim for simple installation design, fast installation times and maximum system performance and predictability. The installation of high-voltage DC central inverter technology, however, requires significant preparation, precautionary safety measures, time-consuming string calculations, extensive design expertise and specialized installation equipment, training and knowledge. Together, these factors significantly increase complexity and cost of installation and limit overall productivity for the installer.

System owner. Solar system owners aim for high energy production, low cost, high reliability and low maintenance requirements, as well as reduced fire risks. With traditional central inverters, owners often are unable to optimize the size or shape of their solar PV installations due to string design limitations. As such, they experience performance loss from shading and other obstructions, can face frequent system failures and lack the ability to effectively monitor the performance of their solar PV installation. In addition, central inverter installations operate at high-voltage DC which bears significant fire risks. Further, due to their large size, central inverter installations can affect architectural aesthetics of the house or commercial building.

### Our Products

We design, develop, manufacture and sell a microinverter system for the solar PV industry. We have built from the ground up a semiconductor-based microinverter system that converts energy at the individual solar module level and, combined with our proprietary networking and software technologies, provides advanced energy monitoring and control. This is vastly different than the central inverter approach that can only convert energy of the entire array of solar modules from a single high voltage electrical unit, and lacks intelligence about the energy producing capacity of the solar array.

Our microinverter solution brings a system-based, high technology approach to solar energy generation leveraging our design expertise across power electronics, semiconductors, networking, and embedded and web-based software technologies. Our microinverter system consists of three key components: our Enphase microinverter, Envoy communications gateway and Enlighten web-based software:

Our Enphase microinverter delivers efficient and reliable power conversion at the individual solar module level by introducing a digital architecture that incorporates custom application specific integrated circuits, or ASICs, specialized power electronics devices and an embedded software subsystem that optimizes energy production from each module and manages the core ASIC functions. A residential solar installation typically consists of 5 to 50 microinverters; a small commercial solar installation typically consists of 50 to 500 microinverters; and a medium or larger commercial solar installation typically consists of 500 to 10,000 microinverters, or more.

Our Envoy communications gateway is installed in the system owner's home or business and serves as a networking hub that collects data from the microinverter array and sends the information to our hosted data center. One Envoy is typically sold with each solar installation and can support up to 500 Enphase microinverters.

Our Enlighten web-based software collects and analyzes this information to enable system owners to monitor and realize the highest performance of their solar PV system. In addition, Enlighten also provides an online portal specifically designed for installers to enable them to track and manage all of their Enphase enabled projects and monitor and analyze the performance of their installed systems.

Together, our Enphase microinverter, Envoy communications gateway and Enlighten web-based software function as a single unified system that enhances energy production, simplifies design and installation, reduces costs, increases system uptime and reliability, reduces fire safety risk and provides the ability to monitor performance in real-time. With an Enphase microinverter system, we believe solar system owners can achieve a higher return on investment

over the lifetime of the solar system than would be achieved using a traditional central inverter approach.

## Table of Contents

Key elements of our solution include:

**Productive-Superior Energy Production.** Our microinverter system enables the maximum possible energy production from each module, overcoming a fundamental design limitation of central inverters which are limited by the lowest performing module. We believe that our microinverter systems achieve higher energy production and can generate superior returns on investment relative to central inverter solutions for system owners.

**Reliable-Longer Life and No Single Point of Failure.** Reduction of component count, primarily through semiconductor integration in our microinverter, allows us to design a reliable system that can withstand harsh environmental conditions. In addition, because we process low voltages and power levels, our components experience less stress and last longer than traditional central inverters. Furthermore, the distributed architecture of our microinverter system translates into greater system uptime. If a microinverter unit fails, it results in lost energy production from a single solar module only and not the entire array. In addition, we offer a limited warranty of up to 25 years on our microinverters.

**Simple-Ease of Design and Installation.** Using microinverter technology, an installer can design a system of any size and any roof configuration with a simple modular approach. After initial installation, the system can be easily expanded by even a single module. Our single inverter per module approach converts directly to AC and enables a simpler, all AC design, eliminating the extra cost, training and complexity associated with typical high voltage DC implementation. Without these complexities, installation of microinverter technology is greatly simplified, improving installers' productivity. This also enables a new class of solar installer, such as electricians and general contractors. Finally, our microinverters are installed on the roof and hidden from view, with minimal impact to the aesthetics of a home or building.

**Smart-Module-Level Monitoring and Analytics.** Our microinverter system allows us to collect energy production information in real time on a per solar module basis. This enables powerful system analytics and allows Enphase to offer installers visibility into how systems are performing and the ability to continuously optimize energy production-which is particularly important when operating commercial solar installations. Such services include system performance and diagnostics, benchmarking, as well as system and module alerts and fault statistics.

**Safe-“All AC” Solution.** Microinverters are safer because they process low DC voltages relative to central inverters. High voltage arc faults associated with traditional central inverter are the leading cause of fires of solar PV installations. Microinverter technology mitigates this safety risk.

Due to the benefits of our solution, we believe solar installers achieve greater productivity and competitive differentiation over installers of traditional central inverter solar PV installations, and the solar system owner achieves a higher return on investment with an Enphase microinverter system over the life of the solar system.

## Our Strategy

Our objective is to continue to be the leading provider of microinverter systems for the solar industry worldwide and to accelerate the shift from traditional central inverters to microinverter technology. Key elements of our strategy include:

- **Continue to Penetrate Our Core Markets.** We intend to capitalize on our market leadership in the microinverter category and our momentum with installers and owners to expand our market share position in our core U.S. market.
- **Enter New Geographic Markets.** We intend to further increase our market share in Europe and Australia. In addition, we intend to expand into new markets with new and existing products and local go-to-market capabilities.
- **Increase Power and Efficiency and Reduce Cost per Watt.** Our engineering team is focused on continuing to increase average power conversion efficiency above 96.5% and AC output power beyond 250 watts. We intend to continue to leverage our semiconductor integration, power electronics expertise and manufacturing economies of scale to further



reduce cost per watt.

**Extend Our Technological Innovation.** We distinguish ourselves from other inverter companies with our system-based and high-tech approach, and the ability to leverage strong research and development capabilities. As of December 31, 2013, we had 36 issued U.S. patents, 11 issued non-U.S. patents, 80 pending U.S. patent applications and 139 pending non-U.S. counterpart patent applications.

**Expand Our Product Offering for Commercial Installations and Utility-Scale Installations.** We intend to expand our product offering by introducing new microinverter systems targeted at larger commercial installations and

## Table of Contents

utility-scale installations. We expect these market segments to become a significant revenue opportunity for us in the future.

**Develop a Software Management Platform.** We intend to build upon our strong position as the leading supplier of microinverter systems to develop additional energy management services for our growing network of solar installers worldwide.

### Customers and Sales

We currently offer microinverter systems targeting the residential and commercial markets in the United States, Canada, the United Kingdom, France, the Benelux region, certain other European markets and Australia. We sell our microinverter systems primarily to solar distributors who resell to installers and integrators, who in turn integrate our products into complete solar PV installations for residential and commercial system owners. We work with many of the leading solar distributors. In 2013, Vivint Solar, Inc., CED Greentech and Focused Energy, Inc. accounted for 15%, 14% and 11% of total net revenues, respectively. In addition to our distributors, we sell directly to large installers, OEMs and strategic partners. Our OEM customers include solar module manufacturers who bundle our products and solutions with their solar module products and resell to both distributors and installers. Strategic partners include a variety of companies and arrangements, including industrial equipment suppliers and providers of solar financing solutions. We also sell the Enphase-branded product directly to electrical contractor distributors in North America. Historically, revenues generated from the U.S. market have represented more than 80% of our business, with the remainder from Canada, Europe and Australia.

### Manufacturing, Quality Control and Key Suppliers

We outsource the manufacturing of our products to two key manufacturing partners, Flextronics International Ltd. and Phoenix Contact GmbH & Co. KG. Flextronics assembles and tests our microinverter pursuant to a manufacturing services agreement. Prices for such services are mutually agreed to by the parties on a quarterly basis and we are obligated to purchase manufactured products and raw materials that cannot be resold upon the termination of the agreement. Flextronics' assembly and test plants for our products are located in Fuyong, China, and New Market, Ontario, Canada. Flextronics also provides receiving, kitting, storage, transportation, inventory visibility and other value-added logistics services at locations managed by Flextronics pursuant to a logistics services agreement. Phoenix manufactures our custom AC cable pursuant to a cooperation agreement. Phoenix's facilities are located in Poland and China. In addition, we rely on several unaffiliated companies to supply certain components used in the fabrication of our microinverter system.

### Customer Service

We maintain high levels of customer engagement through our customer support group and the Enlighten web-based software portal, and have cultivated an organizational focus on customer satisfaction. Our dedicated customer support group focuses on responding to inbound inquiries regarding any of our products and services. As of December 31, 2013, our customer support staff consisted of 55 employees in the United States and 10 employees in Europe. In addition, customized support programs are being developed for selected OEM partners, large direct installers and distributors to help prioritize and track support issues for key partners and to provide a single point of contact.

### Research and Development

We devote substantial resources to research and development with the objective of developing new products and systems, adding new features to existing products and systems and reducing unit costs of our Enphase microinverter system. Our development strategy is to identify features, products and systems for both software and hardware that reduce the cost and optimize the effectiveness of our microinverter solutions for our customers. We measure the effectiveness of our research and development against metrics, including product unit cost, efficiency, reliability, power output and ease-of-use. As of December 31, 2013, our research and development staff consisted of 162 employees, of whom 140 were located in the United States and the remainder primarily located in New Zealand. Our research and development expenses were \$34.5 million, \$35.6 million and \$25.1 million for the years ended December 31, 2013, 2012 and 2011, respectively.

### Intellectual Property

Our success depends, in part, on our ability to maintain and protect our proprietary technologies. We rely primarily on patent, trademark, copyright and trade secrets laws in the United States and similar laws in other countries,

confidentiality agreements and procedures and other contractual arrangements to protect our technology. As of December 31, 2013, we had 36 issued U.S. patents, 11 issued non-U.S. patents, 80 pending U.S. patent applications and 139 pending non-U.S. counterpart patent applications. Our issued patents are scheduled to expire between years 2027 and 2032.

We license certain power line communications technology and software for integration into our ASICs pursuant to a fully-paid, royalty-free license, which includes the right for us to source directly from the licensor's suppliers or manufacture

## Table of Contents

certain ASIC hardware should the licensor fail, under certain conditions, to deliver such technology in the future. This license includes a limited exclusivity period during which the licensor has agreed not to license the licensed technology to any third party manufacturer of electronic components or systems for use in the solar energy market. The license carries a seventy-five year term, subject to earlier termination upon mutual agreement of the parties, or by us in connection with the insolvency of the licensor.

We also license digital intellectual property cores, or IP blocks, for integration into and distribution with certain electronic components built into our products, including our ASICs, complex programmable logic devices, or CPLDs, and field-programmable gate arrays, or FPGAs. This is a fully-paid, non-exclusive, non-transferrable, royalty-free license providing for the integration of such digital IP blocks in an unlimited number of electronic component designs and the distribution of such electronic components with our products. Other than in connection with the distribution of our products, our use of such digital IP blocks is limited to certain of our business sites. The license is perpetual, subject to earlier termination by either party upon the termination, suspension or insolvency of the other party's business, or by the licensor upon a breach of the license agreement by us. In addition, we license open source software from third parties for integration into our Envoy products. Such open source software is licensed under open source licenses. These licenses are perpetual and require us to attribute the source of the software to the original software developer, which we provide via our website.

We continually assess appropriate occasions for seeking patent protection for those aspects of our technology, designs and methodologies and processes that we believe provide significant competitive advantages. A majority of our patents relate to DC to AC power conversion for alternative energy power systems, as well as power system monitoring, control and management systems.

With respect to, among other things, proprietary know-how that is not patentable and processes for which patents are difficult to enforce, we rely on trade secret protection and confidentiality agreements to safeguard our interests. We believe that many elements of our microinverter manufacturing process involve proprietary know-how, technology or data that are not covered by patents or patent applications, including technical processes, test equipment designs, algorithms and procedures.

All of our research and development personnel have entered into confidentiality and proprietary information agreements with us. These agreements address intellectual property protection issues and require our employees to assign to us all of the inventions, designs and technologies they develop during the course of employment with us.

We also require our customers and business partners to enter into confidentiality agreements before we disclose any sensitive aspects of our microinverter, technology or business plans.

### Seasonality

Historically, sales of our products in the second, third and fourth quarters have been positively affected by seasonal customer demand trends, including solar economic incentives, weather patterns and construction cycles, followed by a seasonally softer first quarter. Although these seasonal factors are common in the solar sector, historical patterns should not be considered a reliable indicator of our future sales activity or performance.

### Competition

The markets for our products are highly competitive, and we compete both with well-established traditional central inverter manufacturers and new technology start-ups. The principal areas in which we compete with other companies include:

- Product performance and features;
- Total cost of ownership (usually measured by levelized cost of electricity, or LCOE);
- Breadth of product line;
- Local sales and distribution capabilities;
- Module compatibility and interoperability;
- Reliability and duration of product warranty;
- Technological expertise;

- Brand recognition and customer service and support;
- Compliance with industry standards and certifications and local electrical code;
- Size and financial stability of operations;
- Size of installed base;
- and

6

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Table of Contents

**Local manufacturing and product content.**

Currently, competitors in the inverter market range from large, international companies such as SMA Solar Technology AG, Fronius International GmbH and Power-One, Inc. to emerging companies offering alternative microinverter or other solar electronics products. We principally compete with the large, incumbent solar inverter companies because traditional central inverter solutions can be used as alternatives to our microinverter solution. We believe, however, that our microinverter solutions offer significant advantages and competitive differentiation relative to traditional central inverter technology, even when traditional central inverter technology is supplemented by DC-to-DC optimizers. SMA Solar Technology AG and Power-One Inc. have recently introduced or announced plans to introduce microinverter products. In addition, several new entrants to the microinverter market have recently announced plans to ship or have already shipped products, including some of our OEM customers and partners.

**Employees**

As of December 31, 2013, we had 398 employees. Of the full-time employees, 161 were engaged in research and development, 156 in sales and marketing, 50 in a general and administrative capacity and 31 in manufacturing and operations. Of these employees, 338 were in the United States, 34 in Europe, 19 in New Zealand, four in Australia, two in Canada and one employee in China.

None of our U.S., New Zealand, U.K. and Australia employees are represented by a labor union with respect to his or her employment with us; however, our employees in France and Italy are represented by a collective bargaining agreement. We have not experienced any employment-related work stoppages, and we consider our relations with our employees to be good.

**Available Information**

We file electronically with the U.S. Securities and Exchange Commission, or SEC, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. We make available on our website at [www.enphase.com](http://www.enphase.com) (under "Investors-Financial Information-SEC Filings"), free of charge, copies of these reports as soon as reasonably practicable after filing these reports with, or furnishing them to, the SEC.

Table of Contents

Item 1A. Risk Factors

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations. The risks described below are not the only ones we face. Additional risks not presently known to us or that we currently believe are not material may also significantly impair our business operations. Our business could be harmed by any of these risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should also refer to the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes.

We have a history of losses which may continue in the future, and we cannot be certain that we will achieve or sustain profitability.

We have incurred net losses in each quarter since inception, and we may continue to incur additional net losses in the future. We incurred net losses of \$25.9 million, \$38.2 million and \$32.3 million for 2013, 2012 and 2011, respectively. As of December 31, 2013, we had an accumulated deficit of \$152.9 million. Our revenue growth may slow or revenue may decline for a number of possible reasons, many of which are outside our control, including a decline in demand for our offerings, increased competition, a decrease in the growth of the solar industry or our market share, or our failure to continue to capitalize on growth opportunities. If we fail to generate sufficient revenue to support our operations, we may not be able to achieve or sustain profitability.

Our limited operating history makes it difficult to evaluate our current business and future prospects.

We have been in existence since 2006 and did not begin shipping our products in commercial quantities until mid-2008. Much of our growth has occurred in recent periods. Our limited operating history makes it difficult to evaluate our current business and future prospects. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, including increased expenses as we continue to grow our business. If we do not manage these risks and overcome these difficulties successfully, our business will suffer.

Since we began commercial shipments of our products, our revenue, gross profit and results of operations have varied and are likely to continue to vary from quarter to quarter due to a number of factors, many of which are not within our control. It is difficult for us to accurately forecast our future revenue and gross profit and plan expenses accordingly and, therefore, it is difficult for us to predict our future results of operations.

Further, our efforts to achieve broader market acceptance for our microinverter systems and to expand beyond our existing markets may never succeed, which would adversely impact our ability to generate additional revenue or become profitable.

If demand for solar energy solutions does not continue to grow or grows at a slower rate than we anticipate, our business will suffer.

Our microinverter systems are utilized in solar photovoltaic, or PV, installations, which provide on-site distributed power generation. As a result, our future success depends on continued demand for solar energy solutions and the ability of solar equipment vendors to meet this demand. The solar industry is an evolving industry that has experienced substantial changes in recent years, and we cannot be certain that consumers and businesses will adopt solar PV systems as an alternative energy source at levels sufficient to grow our business. Traditional electricity distribution is based on the regulated industry model whereby businesses and consumers obtain their electricity from a government regulated utility. For alternative methods of distributed power to succeed, businesses and consumers must adopt new purchasing practices. The viability and continued growth in demand for solar energy solutions, and in turn, our products, may be impacted by many factors outside of our control, including:

- market acceptance of solar PV systems based on our product platform;

- cost competitiveness, reliability and performance of solar PV systems compared to conventional and non-solar renewable energy sources and products;

- availability and amount of government subsidies and incentives to support the development and deployment of solar energy solutions;

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the extent to which the electric power industry and broader energy industries are deregulated to permit broader adoption of solar electricity generation;

8

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Table of Contents

the cost and availability of key raw materials and components used in the production of solar PV systems; prices of traditional carbon-based energy sources; levels of investment by end-users of solar energy products, which tend to decrease when economic growth slows; and the emergence, continuance or success of, or increased government support for, other alternative energy generation technologies and products.

If demand for solar energy solutions fails to develop sufficiently, demand for our customers' products as well as demand for our products will decrease, which would have an adverse impact on our ability to increase our revenue and grow our business.

Short-term demand and supply imbalances, especially for solar module technology, recently have caused prices for solar technology solutions to decline rapidly. Furthermore, competition in the solar industry has increased due to the emergence of Asian manufacturers along the entire solar value chain causing further price declines, excess inventory and oversupply. These market disruptions may continue to occur and may increase pressure to reduce prices, which could adversely affect our business and financial results.

The reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity applications could reduce demand for solar PV systems and harm our business.

The market for on-grid applications, where solar power is used to supplement a customer's electricity purchased from the utility network or sold to a utility under tariff, depends in large part on the availability and size of government and economic incentives that vary by geographic market. Because our customers' sales are typically into the on-grid market, the reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity may negatively affect the competitiveness of solar electricity relative to conventional and non-solar renewable sources of electricity, and could harm or halt the growth of the solar electricity industry and our business.

In general, the cost of solar power currently exceeds retail electricity rates, and we believe this tendency will continue in the near term. As a result, national, state and local government bodies in many countries, most notably Australia, Canada, France, Belgium, Germany, Italy, Japan, the People's Republic of China, the United Kingdom, Spain and the United States, have provided incentives in the form of feed-in tariffs, or FiTs, rebates, tax credits and other incentives to system owners, distributors, system integrators and manufacturers of solar PV systems to promote the use of solar electricity in on-grid applications and to reduce dependency on other forms of energy. Many of these government incentives expire, phase out over time, terminate upon the exhaustion of the allocated funding, require renewal by the applicable authority or are being amended by governments due to changing market circumstances or changes to national, state or local energy policy.

Electric utility companies or generators of electricity from other non-solar renewable sources of electricity may successfully lobby for changes in the relevant legislation in their markets that are harmful to the solar industry. Reductions in, or eliminations or expirations of, governmental incentives in regions that we focus our sales efforts could result in decreased demand for and lower revenue from solar PV systems there, which would adversely affect sales of our products. In addition, our ability to successfully penetrate new geographic markets may depend on new countries adopting and maintaining incentives to promote solar electricity, to the extent such incentives are not currently in place. Additionally, electric utility companies may establish pricing structures or interconnection requirements that could adversely affect our sales and be harmful to the solar and distributed rooftop solar generation industry.

Our focus on a limited number of specific markets increases risks associated with the elimination or expiration of governmental subsidies and economic incentives for on-grid solar electricity applications.

To date, we have generated substantially all of our revenues from North America and expect to generate a substantial amount of revenues from North America in the future. There are a number of important incentives that are expected to phase-out or terminate in the future, which could adversely affect sales of our products. A substantial majority of our revenues come from the United States, which has both federal and state incentives. The Renewable Energy and Job Creation Act of 2008 provides a 30% federal tax credit for residential and commercial solar installations, which expire on December 31, 2016. The American Recovery and Reinvestment Act of 2009, as amended, created a renewable energy grant program that offered cash payments in lieu of investment tax credits to renewable energy project developers for eligible property placed in service prior to December 31, 2011 or placed in service by the specified

credit termination date, if construction began prior to December 31, 2011. We believe the tax credit and grant programs have had a positive effect on our sales since inception.

9

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## Table of Contents

However, unless the tax credit program is further extended, the eventual phase-out of this program could adversely affect sales of our products in the future.

California is the largest single solar market in the United States, based on analysis from SEIA data and GTM Research, and a significant portion of our revenues are generated in California. In 2007, the State of California launched its 10-year, \$3 billion “Go Solar California” campaign, which encourages the installation of an aggregate of 3,000 MW of solar energy systems in homes and businesses by the end of 2016. The largest part of the campaign, the “California Solar Initiative,” provides rebates and performance-based incentives which decrease in intervals as installation thresholds are met. The “Go Solar California” program is scheduled to expire on December 31, 2016, but the pace of installations has been high and the program is likely to conclude sooner. Both Pacific Gas and Electric and San Diego Gas and Electric have surpassed all installation thresholds in the residential sector and are no longer accepting applications. Pacific Gas and Electric is placing all new applications for the commercial sector on a waiting list, and these applications may not be able to receive incentives. Programs for other utilities and market segments continue, but could conclude prior to December 31, 2016 if installations continue at their current pace.

We also sell our products in Ontario, Canada. The Ontario Power Authority Green Energy and Green Economy Act of 2009 created two separate FiT programs for projects greater than 10kW and for projects less than 10kW. These FiT programs provide participants with a fixed price for electricity produced over a 20-year contract term. Both programs were recently suspended while they underwent a review. The program for projects less than 10kW was re-opened to new applications in July 2012 with a procurement target of 50 MW. The program for projects between 10kW and 500kW was re-opened for new applications between December 14, 2012 and January 18, 2013 with a procurement target of 200 MW. The Government of Ontario has announced plans for annual procurement targets of 50MW of projects under 10kW and 150MW of projects between 10kW and 500kW through 2017. However, all procurement occurs at the direction of the Government of Ontario and these plans could change, or market conditions could result in procurement targets not being met. Furthermore, the Government of Ontario has the authority to change the FiTs for future contracts at its discretion, and has the authority to modify, suspend, or discontinue the program at any time. Suspension of the FiT program in Ontario directly impacted and could continue to impact our business. Furthermore, any future suspension or modification of the program could negatively affect our business, financial condition and results of operations.

In the fourth quarter of 2011, we began selling our products in France, Italy and the Benelux region. During the second quarter of 2012, we opened a sales office in the United Kingdom and began selling our products there at the beginning of the third quarter. A number of European countries, including Germany, Belgium and the United Kingdom, have adopted reductions to their FiTs, Spain announced a suspension of its FiT for new renewable energy projects in January 2012 and Italy concluded its FiT program in July 2013. Certain countries, notably Greece and Spain, have proposed or enacted taxes levied on renewable energy. These and related developments have significantly impacted the solar industry in Europe and may adversely affect the future demand for the solar energy solutions in Europe. The reductions in European tariffs and subsidies and other requirements or incentives, including local content requirements or incentives, have negatively affected and may continue to negatively affect our business, financial condition and results of operations as we seek to increase our sales in Europe.

In the first quarter of 2013, we began selling our products in Australia. In 2012, Australia enacted a national price on carbon emissions intended to increase the cost of traditional energy sources, thereby making renewable energy sources more attractive. Beginning in 2012, several states in Australia also began to gradually reduce their FiTs. As of October 2013, all FiT programs in Australia have expired. Australia recently elected a new national Government. The new leadership has pledged to revise national energy policy, including the carbon price, Renewable Energy Target, and certain renewable energy financing mechanisms. The reductions in incentives and uncertainty around future energy policy may negatively affect our business financial condition, and results of operations as we seek to increase our business in Australia. Additionally, as we further expand to other countries, changes in incentive programs or electricity policies could negatively affect returns on our investments in those countries as well as our business, financial condition, and results of operations.

The threat of continuing global economic, capital markets and credit disruptions, including sovereign debt issues, pose risks for our business.

The threat of continuing global economic, capital markets and credit disruptions, including the sovereign debt issues in Europe, pose risks for our business. These risks include slower economic activity and investment in projects that make use of our products and services. These economic developments, particularly decreased credit availability, have reduced demand for solar products. The European sovereign debt crisis has caused and may continue to cause European governments to reduce, eliminate or allow to expire government subsidies and economic incentives for solar energy, which could limit our growth or

Table of Contents

cause our net sales to decline and materially and adversely affect our business, financial condition, and results of operations. These conditions, including reduced incentives, continued decreases in credit availability, as well as continued economic instability, have and may continue to adversely impact our business, financial condition and results of operations as we seek to increase our sales in Europe.

Our microinverter systems may not achieve broader market acceptance, which would prevent us from increasing our revenue and market share.

If we fail to achieve broader market acceptance of our products, there would be an adverse impact on our ability to increase our revenue, gain market share and achieve and sustain profitability. Our ability to achieve broader market acceptance for our products will be impacted by a number of factors, including:

- our ability to timely introduce and complete new designs and timely qualify and certify our products;
- whether installers, system owners and solar financing providers will continue to adopt our microinverter systems, which is a relatively new technology with a limited history with respect to reliability and performance;
- whether installers, system owners and solar financing providers will be willing to purchase microinverter systems from us given our limited operating history;
- the ability of prospective system owners to obtain long-term financing for solar PV installations based on our product platform on acceptable terms or at all;
- our ability to produce microinverter systems that compete favorably against other solutions on the basis of price, quality, reliability and performance;
- our ability to develop products that comply with local standards and regulatory requirements, as well as potential in-country manufacturing requirements; and
- our ability to develop and maintain successful relationships with our customers and suppliers.

In addition, our ability to achieve increased market share will depend on our ability to increase sales to established solar installers, who have traditionally sold central inverters. These installers often have made substantial investments in design, installation resources and training in traditional central inverter systems, which may create challenges for us to achieve their adoption of our microinverter systems.

Our gross profit may fluctuate over time, which could impair our ability to achieve or maintain profitability.

Our gross profit has varied in the past and is likely to continue to vary significantly from period to period. Our gross profit may be adversely affected by numerous factors, some of which are beyond our control, including:

- changes in customer, geographic or product mix;
- increased price competition, including the impact of customer discounts and rebates; ability to reduce and control product costs;
- warranty costs and reserves, including changes resulting from changes in estimates related to the long-term performance of our products, product replacement costs and warranty claim rates;
- loss of cost savings due to changes in component or raw material pricing or charges incurred due to inventory holding periods if product demand is not correctly anticipated;
- introduction of new products;
- ordering patterns from our distributors;
- price reductions on older products to sell remaining inventory;
- our ability to reduce production costs, such as through technology innovations, in order to offset price declines in older products over time;
- changes in shipment volume;
- changes in distribution channels;
- excess and obsolete inventory and inventory holding charges; and
- expediting costs incurred to meet customer delivery requirements.

## Table of Contents

Fluctuations in gross profit may adversely affect our ability to manage our business or achieve or maintain profitability.

The inverter industry is highly competitive and we expect to face increased competition as new and existing competitors introduce microinverter products, which could negatively impact our results of operations and market share.

To date, we have competed primarily against central inverter manufacturers and until recently have faced little direct competition in selling our microinverter systems. Marketing and selling our microinverter systems against traditional inverter solutions is highly competitive. Currently, competitors in the inverter market range from large companies such as SMA Solar Technology AG, Fronius International GmbH and Power-One Inc. to emerging companies offering alternative microinverter or other solar electronics products. Several of our existing and potential competitors are significantly larger, have greater financial, marketing, distribution, customer support and other resources, are more established than we are, and have significantly better brand recognition. Some of our competitors have more resources to develop or acquire, and more experience in developing or acquiring, new products and technologies and in creating market awareness for these products and technologies. Further, certain competitors may be able to develop new products more quickly than we can and may be able to develop products that are more reliable or that provide more functionality than ours. In addition, some of our competitors have the financial resources to offer competitive products at aggressive or below-market pricing levels, which could cause us to lose sales or market share or require us to lower prices for our microinverter systems in order to compete effectively. Suppliers of solar products, particularly solar modules, have experienced eroding prices over the last several years and as a result many have faced margin compression and declining revenues. If we have to reduce our prices by more than we anticipated, or if we are unable to offset any future reductions in our average selling prices by increasing our sales volume, reducing our costs and expenses or introducing new products, our revenues and gross profit would suffer.

We expect competition to intensify as new and existing competitors enter the microinverter market and additional add-on components like DC-to-DC optimizers that can be used with central inverters gain traction. We believe that a number of companies have developed or are developing microinverters and other products that will compete directly with our microinverter systems. SMA Solar Technology AG and Power-One Inc. have recently introduced microinverter products. In addition, several new entrants to the microinverter market have recently announced plans to ship or have already shipped products, including some of our OEM customers and partners.

We also may face competition from some of our customers who evaluate our capabilities against the merits of manufacturing products internally. For instance, solar module manufacturers could attempt to develop components that directly perform DC to AC conversion in the module itself. Due to the fact that such customers may not seek to make a profit directly from the manufacture of these products, they may have the ability to manufacture competitive products at a lower cost than we would charge such customers. As a result, these customers may purchase fewer of our microinverter systems or sell products that compete with our microinverters systems, which would negatively impact our revenue and gross profit.

Problems with product quality or product performance may cause us to continue to incur additional warranty expenses and may damage our market reputation and cause our revenue and gross profit to decline.

We have offered 15-year limited warranties for our first and second generation microinverters and offer a limited warranty of up to 25 years on our third and fourth generation microinverters. Our limited warranties cover defects in materials and workmanship of our microinverters under normal use and service conditions for up to 25 years following installation. As a result, we bear the risk of warranty claims long after we have sold the product and recognized revenue. Our estimated costs of warranty for previously sold products may change to the extent future products are not compatible with earlier generation products under warranty.

While we offer warranties of up to 25 years, our microinverters have only been in use since mid-2008, when we first commenced commercial sales of our products. Although we conduct accelerated life cycle testing to measure performance and reliability, our microinverter systems have not been tested over the full warranty cycle and do not have a sufficient operating history to confirm how they will perform over their estimated useful life. In addition, under real-world operating conditions, which may vary by location and design, as well as insolation, soiling and weather conditions, a typical solar PV installation may perform in a different way than under standard test conditions. If our

products perform below expectations or have unexpected reliability problems, we may be unable to gain or retain customers and could face substantial warranty expense.

We are required to make assumptions and apply judgments, based on our accelerated life cycle testing and the limited operating history of our products, regarding a number of factors, including the durability and reliability of our products, our anticipated rate of warranty claims and the costs of replacement of defective products. Our assumptions have proven and could in the future prove to be materially different from the actual performance of our products, which has caused and may in

Table of Contents

the future cause us to incur substantial expense to repair or replace defective products. Increases in our estimates of future warranty obligations due to actual product failure rates, field service obligations and rework costs incurred in correcting product failures have caused and could in the future cause us to materially increase the amount of warranty obligations, and have had and may have in the future a corresponding negative impact on our results of operations. We also depend significantly on our reputation for reliability and high-quality products and services, exceptional customer service and our brand name to attract new customers and grow our business. If our products and services do not perform as anticipated or we experience unexpected reliability problems or widespread product failures, our brand and reputation could be significantly impaired and we may lose, or be unable to gain or retain, customers.

Defects and poor performance in our products could result in loss of customers, decreased revenue and unexpected expenses, and we may face warranty, indemnity and product liability claims arising from defective products.

Our products must meet stringent quality requirements and may contain undetected errors or defects, especially when first introduced or when new generations are released. Errors, defects or poor performance can arise due to design flaws, defects in raw materials or components or manufacturing difficulties, which can affect both the quality and the yield of the product. These errors or defects may be dangerous, as defective power components may cause power overloads, potentially resulting in explosion or fire. As we develop new generations of our products and enter new markets, we face higher risk of undetected defects, because our testing protocols may not be able to fully test the products under all possible operating conditions. In the past, we have experienced defects in our products due to certain errors in the manufacturing and design process. Any actual or perceived errors, defects or poor performance in our products could result in the replacement or recall of our products, shipment delays, rejection of our products, damage to our reputation, lost revenue, diversion of our engineering personnel from our product development efforts in order to address or remedy any defects and increases in customer service and support costs, all of which could have a material adverse effect on our business and operations.

Furthermore, defective, inefficient or poorly performing power components may give rise to warranty, indemnity or product liability claims against us that exceed any revenue or profit we receive from the affected products. We could incur significant costs and liabilities if we are sued and if damages are awarded against us. We currently maintain a moderate level of product liability insurance, and there can be no assurance that this insurance will provide sufficient coverage in the event of a claim. Also, we cannot predict whether we will be able to maintain this coverage on acceptable terms, if at all, or that a product liability claim would not harm our business or financial condition. Costs or payments we may make in connection with warranty and product liability claims or product recalls may adversely affect our financial condition and results of operations.

Our Enlighten web-based monitoring service, which our customers use to track and monitor the performance of their solar PV systems based on our product platform, may contain undetected errors, failures, or bugs, especially when new versions or enhancements are released. We have from time to time found defects in our service and new errors in our existing service may be detected in the future. Any errors, defects, disruptions in service or other performance problems with our monitoring service could harm our reputation and may damage our customers' businesses.

If we are unable to effectively manage our growth, our business and operating results may suffer.

We have recently experienced, and expect to continue to experience, significant growth in our sales and operations. Our historical growth has placed, and planned future growth is expected to continue to place, significant demands on our management, as well as our financial and operational resources, to:

- manage a larger organization;
- expand third-party manufacturing, testing and distribution capacity;
  - build additional custom manufacturing test equipment;
- manage an increasing number of relationships with customers, suppliers and other third parties;
- increase our sales and marketing efforts;
- train and manage a growing employee base;
- broaden our customer support capabilities;
- implement new and upgrade existing operational and financial systems; and
- enhance our financial disclosure controls and procedures.





Table of Contents

We cannot assure you that our current and planned operations, personnel, systems, internal procedures and controls will be adequate to support our future growth. If we cannot manage our growth effectively, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures, any of which could have a material adverse effect on our financial condition, results of operation, business or prospects.

Our recent and planned expansion into new markets could subject us to additional business, financial and competitive risks.

We currently offer microinverter systems targeting the residential and commercial markets in the United States, Canada, the United Kingdom, France, the Benelux region, certain other European markets and Australia. We also intend to expand into other international markets and to introduce new microinverter systems targeted at larger commercial and utility-scale installations. Our success in these new geographic and product markets will depend on a number of factors, such as:

- acceptance of microinverters in markets in which they have not traditionally been used;
- our ability to compete in new product markets to which we are not accustomed;
- our ability to manage an increasing manufacturing capacity and production;
- willingness of our potential customers to incur a higher upfront capital investment than may be required for competing solutions;
- our ability to develop solutions to address the requirements of the larger commercial and utility-scale markets;
- timely qualification and certification of new products for larger commercial and utility-scale installations;
- our ability to reduce production costs in order to price our products competitively over time;
- availability of government subsidies and economic incentives for solar energy solutions;
- accurate forecasting and effective management of inventory levels in line with anticipated product demand; and
- our customer service capabilities and responsiveness.

Further, new geographic markets and the larger commercial and utility-scale installation markets have different characteristics from the markets in which we currently sell products, and our success will depend on our ability to properly address these differences. These differences may include:

- differing regulatory requirements, including tax laws, trade laws, labor, safety, local content and consumer protection regulations, tariffs, export quotas, customs duties or other trade restrictions;
- limited or unfavorable intellectual property protection;
- risk of change in international political or economic conditions;
- restrictions on the repatriation of earnings;
- fluctuations in the value of foreign currencies and interest rates;
- difficulties and increased expenses in complying with a variety of U.S. and foreign laws, regulations and trade standards, including the Foreign Corrupt Practices Act;
- potentially longer sales cycles;
- higher volume requirements;
- increased customer concentrations;
- warranty expectations and product return policies; and
- cost, performance and compatibility requirements.

Failure to develop and introduce these new products successfully, to generate sufficient revenue from these products to offset associated research and development, marketing and manufacturing costs, or to otherwise effectively anticipate and manage the risks and challenges associated with our potential expansion into new product and geographic markets, could adversely affect our revenues and our ability to achieve or sustain profitability.

## Table of Contents

A drop in the retail price of electricity derived from the utility grid or from alternative energy sources, or a change in utility pricing structures, may harm our business, financial condition and results of operations.

We believe that a system owner's decision to purchase a solar PV system is strongly influenced by the cost of electricity generated by solar PV installations relative to the retail price of electricity from the utility grid and the cost of other renewable energy sources, including electricity from solar PV installations using central inverters. Decreases in the retail prices of electricity from the utility grid would make it more difficult for all solar PV systems to compete. In particular, growth in unconventional natural gas production and an increase in global liquefied natural gas capacity are expected to keep natural gas prices relatively low for the foreseeable future. Persistent low natural gas prices, lower prices of electricity produced from other energy sources, such as nuclear power, or improvements to the utility infrastructure could reduce the retail price of electricity from the utility grid, making the purchase of solar PV systems less economically attractive and lowering sales of our microinverter systems. In addition, energy conservation technologies and public initiatives to reduce demand for electricity also could cause a fall in the retail price of electricity from the utility grid. Moreover, technological developments by our competitors in the solar components industry, including manufacturers of central inverters, could allow these competitors or their partners to offer electricity at costs lower than those that can be achieved from solar PV installations based on our product platform, which could result in reduced demand for our products. Additionally, as increasing adoption of distributed generation places pressure on traditional utility business models or utility infrastructure, utilities may change their pricing structures to make installation or operation of solar distributed generation more costly. Such measures can include grid access fees, costly or lengthy interconnection studies, limitations on distributed generation penetration levels, or other measures. If the cost of electricity generated by solar PV installations incorporating our microinverter systems is high relative to the cost of electricity from other sources, our business, financial condition and results of operations may be harmed.

If we do not forecast demand for our products accurately, we may experience product shortages, delays in product shipment, excess product inventory, or difficulties in planning expenses, which will adversely affect our business and financial condition.

We manufacture our products according to our estimates of customer demand. This process requires us to make multiple forecasts and assumptions relating to the demand of our distributors, their end customers and general market conditions. Because we sell most of our products to distributors, who in turn sell to their end customers, we have limited visibility as to end-customer demand. We depend significantly on our distributors to provide us visibility into their end-customer demand, and we use these forecasts to make our own forecasts and planning decisions. If the information from our distributors turns out to be incorrect, then our own forecasts may also be inaccurate.

Furthermore, we do not have long-term purchase commitments from our distributors or end customers, and our sales are generally made by purchase orders that may be canceled, changed or deferred without notice to us or penalty. As a result, it is difficult to forecast future customer demand to plan our operations.

If we overestimate demand for our products, or if purchase orders are canceled or shipments are delayed, we may have excess inventory that we cannot sell. We may have to make significant provisions for inventory write-downs based on events that are currently not known, and such provisions or any adjustments to such provisions could be material.

Conversely, if we underestimate demand, we may not have sufficient inventory to meet end-customer demand, and we may lose market share, damage relationships with our distributors and end customers and forgo potential revenue opportunities. Obtaining additional supply in the face of product shortages may be costly or impossible, particularly in the short term and in light of our outsourced manufacturing processes, which could prevent us from fulfilling orders in a timely and cost efficient manner or at all. In addition, if we overestimate our production requirements, our contract manufacturers may purchase excess components and build excess inventory. If our contract manufacturers, at our request, purchase excess components that are unique to our products and are unable to recoup the costs of such excess through resale or return or build excess products, we could be required to pay for these excess parts or products and recognize related inventory write-downs.

In addition, we plan our operating expenses, including research and development expenses, hiring needs and inventory investments, in part on our estimates of customer demand and future revenue. If customer demand or revenue for a particular period is lower than we expect, we may not be able to proportionately reduce our fixed operating expenses

for that period, which would harm our operating results for that period.

Ordering patterns from our distributors may cause our revenue to fluctuate significantly from period to period.

Our distributors place purchase orders with us based on their assessment of end-customer demand and their forecasts. Because these forecasts may not be accurate, channel inventory held at our distributors may fluctuate significantly due to the difference between their forecasts and actual demand. As a result, distributors adjust their purchase orders placed with us in

Table of Contents

response to changing channel inventory levels, as well as their assessment of the latest market demand trends. We have limited visibility into future end customer demand. A significant decrease in our distributors' channel inventory in one period may lead to a significant rebuilding of channel inventory in subsequent periods, or vice versa, which may cause our quarterly revenue and operating results to fluctuate significantly. This fluctuation may cause our results to fall short of analyst or investor expectations in a certain period, which may cause our stock price to decline.

Changes in current laws or regulations or the imposition of new laws or regulations, or new interpretations thereof, by federal or state agencies or foreign governments could impair our ability to compete in international markets.

Changes in current laws or regulations applicable to us or the imposition of new laws and regulations in the United States or other jurisdictions in which we do business, such as Australia, Canada, France, Italy, the United Kingdom, the Benelux region and China, could materially and adversely affect our business, financial condition and results of operations. In addition, changes in our products or changes in export and import laws and implementing regulations may create delays in the introduction of new products in international markets, prevent our customers from deploying our products internationally or, in some cases, prevent the export or import of our products to certain countries altogether.

For example, the Italian energy authority (AEEG) enacted a new set of interconnection standards for solar energy installations that became effective in July 2012, which has negatively impacted our sales in Italy. We continue to explore potential solutions to meet these requirements. However, in the event that we cannot implement a solution in the near term the total market available for our microinverter products in Italy, and our business as a result, may continue to be adversely impacted.

In addition, several states, including Louisiana and California, have either implemented or are considering implementing new restrictions on incentives or rule regulating the installation of solar systems that we may not be able to currently comply with. In the event that we cannot comply with these or other new regulations or implement a solution to such noncompliance as they arise, the total market available for our microinverter products in such states, and our business as a result, may be adversely impacted.

While we are not aware of any other current or proposed export or import regulations which would materially restrict our ability to sell our products in countries where we offer our products for sale, any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by these regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. In such event, our business and results of operations could be adversely affected.

We depend upon a small number of outside contract manufacturers. Our operations could be disrupted if we encounter problems with these contract manufacturers.

We do not have internal manufacturing capabilities, and rely upon a small number of contract manufacturers to build our products. In particular, we rely on contract manufacturers for the manufacture of microinverter products, cabling and our communications gateway related to our microinverter systems. Our reliance on a small number of contract manufacturers makes us vulnerable to possible capacity constraints and reduced control over component availability, delivery schedules, manufacturing yields and costs. We do not have long-term supply contracts with our other manufacturing partners. Consequently, these manufacturers are not obligated to supply products to us for any period, in any specified quantity or at any certain price.

The revenues that our contract manufacturers generate from our orders represent a relatively small percentage of their overall revenues. As a result, fulfilling our orders may not be considered a priority in the event of constrained ability to fulfill all of their customer obligations in a timely manner. In addition, the facilities in which our microinverters, related cabling and communications gateway products are manufactured are located outside of the United States. We believe that the location of these facilities outside of the United States increases supply risk, including the risk of supply interruptions or reductions in manufacturing quality or controls.

If any of our contract manufacturers were unable or unwilling to manufacture our products in required volumes and at high quality levels or renew existing terms under supply agreements, we would have to identify, qualify and select acceptable alternative contract manufacturers. An alternative contract manufacturer may not be available to us when needed or may not be in a position to satisfy our quality or production requirements on commercially reasonable

terms, including price. Any significant interruption in manufacturing would require us to reduce our supply of products to our customers, which in turn

Table of Contents

would reduce our revenues, harm our relationships with our customers and damage our relationships with our distributors and end customers and cause us to forgo potential revenue opportunities.

Manufacturing problems could result in delays in product shipments to customers and could adversely affect our revenue, competitive position and reputation.

We may experience delays, disruptions or quality control problems in our manufacturing operations. Our product development, manufacturing and testing processes are complex and require significant technological and production process expertise. Such processes involve a number of precise steps from design to production. Any change in our processes could cause one or more production errors, requiring a temporary suspension or delay in our production line until the errors can be researched, identified and properly addressed and rectified. This may occur particularly as we introduce new products, modify our engineering and production techniques, and expand our capacity. In addition, our failure to maintain appropriate quality assurance processes could result in increased product failures, loss of customers, increased production costs and delays. Any of these developments could have a material adverse effect on our business, financial condition, and results of operations.

A disruption could also occur in our manufacturing partner's fabrication facility due to any number of reasons, such as equipment failure, contaminated materials or process deviations, which could adversely impact manufacturing yields or delay product shipments. As a result, we could incur additional costs that would adversely affect our gross profit, and product shipments to our customers could be delayed beyond the shipment schedules requested by our customers, which would negatively affect our revenue, competitive position and reputation.

Additionally, manufacturing yields depend on a number of factors, including the stability and manufacturability of the product design, manufacturing improvements gained over cumulative production volumes and the quality and consistency of component parts. Capacity constraints, raw materials shortages, logistics issues, labor shortages, changes in customer requirements, manufacturing facilities or processes, or those of some third-party contract manufacturers and suppliers of raw materials and components have historically caused, and may in the future cause, reduced manufacturing yields, negatively impacting the gross profit on, and our production capacity for, those products. Moreover, an increase in the rejection and rework rate of products during the quality control process before, during or after manufacture would result in our experiencing lower yields, gross profit and production capacity.

The risks of these types of manufacturing problems are further increased during the introduction of new product lines, which has from time to time caused, and may in the future cause, temporary suspension of production lines while problems are addressed or corrected. Since our business is substantially dependent on a limited number of product lines, any prolonged or substantial suspension of manufacturing production lines could result in a material adverse effect on our revenue, gross profit, competitive position, and distributor and customer relationships.

We depend on sole source and limited source suppliers for key components and products. If we are unable to source these components on a timely basis, we will not be able to deliver our products to our customers.

We depend on sole source and limited source suppliers for key components of our products. For example, our ASICs are purchased from a sole source supplier or developed for us by sole source suppliers. Any of the sole source and limited source suppliers upon whom we rely could experience quality and reliability issues, could stop producing our components, cease operations or be acquired by, or enter into exclusive arrangements with, our competitors. We generally do not have long-term supply agreements with our suppliers, and our purchase volumes are currently too low for us to be considered a priority customer by most of our suppliers. As a result, most of these suppliers could stop selling to us at commercially reasonable prices, or at all. Any such quality or reliability issue, or interruption or delay may force us to seek similar components or products from alternative sources, which may not be available on commercially reasonable terms, including price, or at all. Switching suppliers may require that we redesign our products to accommodate new components, and may potentially require us to re-qualify our products, which would be costly and time-consuming. Any interruption in the quality or supply of sole source or limited source components for our products would adversely affect our ability to meet scheduled product deliveries to our customers, could result in lost revenue or higher expenses and would harm our business.

If we or our contract manufacturers are unable to obtain raw materials in a timely manner or if the price of raw materials increases significantly, production time and product costs could increase, which may adversely affect our business.

The manufacturing and packaging processes used by our contract manufacturers depend on raw materials such as copper, aluminum, silicon and petroleum-based products. From time to time, suppliers may extend lead times, limit supplies or increase prices due to capacity constraints or other factors. Certain of our suppliers have the ability to pass along to us

17

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Table of Contents

directly or through our contract manufacturers any increases in the price of raw materials. If the prices of these raw materials rise significantly, we may be unable to pass on the increased cost to our customers. While we may from time to time enter into hedging transactions to reduce our exposure to wide fluctuations in the cost of raw materials, the availability and effectiveness of these hedging transactions may be limited. Due to all these factors, our results of operations could be adversely affected if we or our contract manufacturers are unable to obtain adequate supplies of raw materials in a timely manner or at reasonable cost. In addition, from time to time, we or our contract manufacturers may need to reject raw materials that do not meet our specifications, resulting in potential delays or declines in output. Furthermore, problems with our raw materials may give rise to compatibility or performance issues in our products, which could lead to an increase in customer returns or product warranty claims. Errors or defects may arise from raw materials supplied by third parties that are beyond our detection or control, which could lead to additional customer returns or product warranty claims that may adversely affect our business and results of operations.

If potential owners of solar PV systems based on our product platform are unable to secure financing on acceptable terms, we could experience a reduction in the demand for our solar PV systems.

Many owners of solar PV systems depend on financing to purchase their systems. The limited use of microinverters to date, coupled with our limited operating history, could result in lenders refusing to provide the financing necessary to purchase solar PV systems based on our product platform on favorable terms, or at all. Moreover, in the case of debt financed projects, even if lenders are willing to finance the purchase of these systems, an increase in interest rates or a change in tax incentives could make it difficult for owners to secure the financing necessary to purchase a solar PV system on favorable terms, or at all. In addition, we believe that a significant percentage of owners purchase solar PV systems as an investment, funding the initial capital expenditure through a combination of upfront cash and financing. Difficulties in obtaining financing for solar PV installations on favorable terms, or increases in interest rates or changes in tax incentives, could lower an investor's return on investment in a solar PV installation, or make alternative solar PV systems or other investments more attractive relative to solar PV systems based on our product platform. Any of these events could result in reduced demand for our products, which could have a material adverse effect on our financial condition and results of operations. In addition, an increasing share of residential solar installations has been provided through third party financing structures, such as power purchase or lease agreements. Our sales growth therefore increasingly depends on sales to developers of third party solar finance offerings who provide solar as a service via power purchase agreements or leasing structures. The third party finance market for residential solar in the US and elsewhere is or may become highly concentrated, with a few significant finance companies and several smaller entrants. If we are unable develop relationships and gain a significant share of inverter sales to the major finance companies or new entrants, our overall sales growth will be constrained.

We rely primarily on distributors and large installers to assist in selling our products, and the failure of these customers to perform as expected could reduce our future revenue.

We sell our microinverter systems primarily through distributors, as well as through direct sales to solar equipment installers and sales to developers of third party solar finance offerings. In 2013, Vivint Solar, Inc., CED Greentech and Focused Energy, Inc. accounted for 15%, 14% and 11% of total net revenues, respectively. We do not have exclusive arrangements with these third parties and, as a result, many of our customers also market and sell products from our competitors, which may reduce our sales. Our customers may terminate their relationships with us at any time, or with short notice. Our customers may fail to devote resources necessary to sell our products at the prices, in the volumes and within the time frames that we expect, or may focus their marketing and sales efforts on products of our competitors. In addition, participants in the solar industry are becoming increasingly focused on vertical integration of the solar financing and installation process, which may lead to an overall reduction in the number of potential parties who may purchase and install our products.

Our future performance depends on our ability to effectively manage our relationships with our existing customers, as well as to attract additional customers that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. Termination of agreements with current customers, failure by these customers to perform as expected, or failure by us to cultivate new customer relationships, could hinder our ability to expand our operations and harm our revenue and operating results.

Our success in an “AC module” version of our microinverter system may depend in part upon our ability to continue to work closely with leading solar module manufacturers.

We are currently working on variants of our microinverter system that will enable an “AC module” for direct attachment of the microinverter to the solar modules. The market success of such solutions will depend in part on our ability to continue to work closely with solar module manufacturers to design solar modules that are compatible with such direct

Table of Contents

attachment of our microinverter. We may not be able to encourage solar module manufacturers to work with us on the development of such compatible solutions combining our microinverter system and solar modules for a variety of reasons, including differences in marketing or selling strategy, competitive considerations, lack of competitive pricing, and technological compatibility. In addition, our ability to form effective partnerships with solar module manufacturers may be adversely affected by the substantial changes faced by many of these manufacturers due to declining prices and revenues from sales of solar modules.

If we fail to retain our key personnel or if we fail to attract additional qualified personnel, we may not be able to achieve our anticipated level of growth and our business could suffer.

Our future success and ability to implement our business strategy depends, in part, on our ability to attract and retain key personnel, and on the continued contributions of members of our senior management team and key technical personnel, each of whom would be difficult to replace. All of our employees, including our senior management, are free to terminate their employment relationships with us at any time. Competition for highly skilled technical people is extremely intense, and we face challenges identifying, hiring and retaining qualified personnel in many areas of our business. If we fail to retain our senior management and other key personnel or if we fail to attract additional qualified personnel, we may not be able to achieve our strategic objectives and our business could suffer.

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.

Our success depends to a significant degree on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, copyright, trade secret and unfair competition laws, as well as confidentiality and license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent and trademark registrations in the United States and in certain other countries, some of which have been issued. We cannot guarantee that any of our pending applications will be approved or that our existing and future intellectual property rights will be sufficiently broad to protect our proprietary technology, and any failure to obtain such approvals or finding that our intellectual property rights are invalid or unenforceable could force us to, among other things, rebrand or re-design our affected products. In countries where we have not applied for patent protection or where effective intellectual property protection is not available to the same extent as in the United States, we may be at greater risk that our proprietary rights will be misappropriated, infringed or otherwise violated.

To protect our unregistered intellectual property, including our trade secrets and know-how, we rely in part on trade secret laws and confidentiality and invention assignment agreements with our employees and independent consultants. We also require other third parties who may have access to our proprietary technologies and information to enter into non-disclosure agreements. Such measures, however, provide only limited protection, and we cannot assure that our confidentiality and non-disclosure agreements will prevent unauthorized disclosure or use of our confidential information, especially after our employees or third parties end their employment or engagement with us, or provide us with an adequate remedy in the event of such disclosure. Furthermore, competitors or other third parties may independently discover our trade secrets, in which case we would not be able to assert trade secret rights, copy or reverse engineer our products or portions thereof or develop similar technology. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary rights are infringed, misappropriated or otherwise violated, our business, results of operations or financial condition could be materially harmed.

In the future, we may need to take legal action to prevent third parties from infringing upon or misappropriating our intellectual property or from otherwise gaining access to our technology. Protecting and enforcing our intellectual property rights and determining their validity and scope could result in significant litigation costs and require significant time and attention from our technical and management personnel, which could significantly harm our business. In addition, we may not prevail in such proceedings. An adverse outcome of any such proceeding may reduce our competitive advantage or otherwise harm our financial condition and our business.

Third parties may assert that we are infringing upon their intellectual property rights, which could divert management's attention, cause us to incur significant costs and prevent us from selling or using the technology to which such rights relate.

Our competitors and other third parties hold numerous patents related to technology used in our industry, and claims of patent or other intellectual property right infringement or violation have been litigated against certain of our competitors. From time to time we may also be subject to such claims and litigation. Regardless of their merit, responding to such claims can be time consuming, divert management's attention and resources and may cause us to incur significant expenses. While

19

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Table of Contents

we believe that our products and technology do not infringe in any material respect upon any valid intellectual property rights of third parties, we cannot be certain that we would be successful in defending against any such claims. Furthermore, patent applications in the United States and most other countries are confidential for a period of time before being published, so we cannot be certain that we are not infringing third parties' patent rights or that we were the first to conceive inventions covered by our patents or patent applications. As we become more visible as a publicly traded company, the possibility that third parties may make claims of intellectual property infringement or other violations against us may grow. An adverse outcome with respect to any such claim could invalidate our proprietary rights and force us to do one or more of the following:

- obtain from a third party claiming infringement a license to sell or use the relevant technology, which may not be available on reasonable terms, or at all;
- stop manufacturing, selling, incorporating or using our products that embody the asserted intellectual property;
- pay substantial monetary damages;
- our customers pursuant to indemnification obligations under some of our customer contracts; or expend significant resources to redesign the products that use the infringing technology and to develop or acquire non-infringing technology.

Any of these actions could result in a substantial reduction in our revenue and could result in losses over an extended period of time.

Our failure to obtain the right to use necessary third-party intellectual property rights on reasonable terms, or our failure to maintain, and comply with the terms and conditions applicable to, these rights, could harm our business and prospects.

From time to time we have licensed, and in the future we may choose to or be required to license, technology or intellectual property from third parties in connection with the development of our products. We cannot assure that such licenses will be available to us on commercially reasonable terms, or at all, and our inability to obtain such licenses could require us to substitute technology of lower quality or of greater cost. In addition, we incorporate open source software code in our proprietary software. Use of open source software can lead to greater risks than use of third-party commercial software since open source licensors generally do not provide warranties or controls with respect to origin, functionality or other features of the software. Some open source software licenses require users who distribute open source software as part of their products to publicly disclose all or part of the source code in their software and make any derivative works of the open source code available for limited fees or at no cost. Although we monitor our use of open source software, open source license terms may be ambiguous, and many of the risks associated with the use of open source software cannot be eliminated. If we were found to have inappropriately used open source software, we may be required to release our proprietary source code, re-engineer our software, discontinue the sale of certain products in the event re-engineering cannot be accomplished on a timely basis or take other remedial action. Furthermore, if we are unable to obtain or maintain licenses from third parties or fail to comply with applicable open source licenses, we may be subject to costly third party claims of intellectual property infringement or ownership of our proprietary source code. Any of the foregoing could harm our business and put us at a competitive disadvantage.

Our business has been and could continue to be affected by seasonal trends and construction cycles.

We have been and could continue to be subject to industry-specific seasonal fluctuations in the future, particularly in climates that experience colder weather during the winter months, such as northern Europe, Canada, and the United States. In general, we expect our products in the second, third and fourth quarters have been positively affected by seasonal customer demand trends, including solar economic incentives, weather patterns and construction cycles, followed by a seasonally softer first quarter. In the United States, customers will sometimes make purchasing decisions towards the end of the year in order to take advantage of tax credits or for budgetary reasons. In addition, construction levels are typically slower in colder months. In European countries with FiTs, the construction of solar PV systems may be concentrated during the second half of the calendar year, largely due to the annual reduction of the applicable minimum FiT and the fact that the coldest winter months are January through March. Accordingly, our business and quarterly results of operations could be affected by seasonal fluctuations in the future.

Covenants in our credit facilities may limit our flexibility in responding to business opportunities and competitive developments and increase our vulnerability to adverse economic or industry conditions.

We have lending arrangements with several financial institutions, including loan and security agreements with Wells Fargo Bank, National Association (“Wells Fargo”) and with Hercules Technology Growth Capital, Inc. (“Hercules”). The loan and security agreements with Wells Fargo and with Hercules restrict our ability to take certain actions such as incurring

Table of Contents

additional debt, encumbering our tangible or intangible property, paying dividends, or engaging in certain transactions, such as mergers and acquisitions, investments and asset sales. Our loan and security agreement with Wells Fargo also requires us to maintain certain financial covenants, including liquidity ratios while our agreement with Hercules includes a condition precedent to borrowing that is subject to us achieving certain financial objectives. These restrictions may limit our flexibility in responding to business opportunities, competitive developments and adverse economic or industry conditions. In addition, our obligations under our loan and security agreements with Wells Fargo and Hercules are secured by substantially all of our assets (excluding intellectual property), which limits our ability to provide collateral for additional financing. A breach of any of these covenants, or a failure to pay interest or indebtedness when due under any of our credit facilities, could result in a variety of adverse consequences, including the acceleration of our indebtedness and the forfeiture of our assets subject to security interests in favor of the lenders.

We are an “emerging growth company,” and may elect to comply with reduced public company reporting requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and, for as long as we continue to be an “emerging growth company,” we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies,” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an “emerging growth company” until December 31, 2017 (the last day of the fiscal year following the fifth anniversary of our initial public offering), although we could cease to be an “emerging growth company” earlier if certain events occur as specified in the JOBS Act, such as our achieving annual revenue of at least \$1 billion or our becoming a “large accelerated filer” as defined in Rule 12b-2 of the Exchange Act. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

If we fail to maintain an effective system of internal controls or are unable to remediate any deficiencies in our internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, requires us to establish and maintain internal control over financial reporting and disclosure controls procedures. The process of implementing our internal controls and complying with Section 404 has required, and will continue to require, significant attention of management. Although we are currently not required to provide an auditor’s attestation report on management’s assessment of the effectiveness of our internal control over financial reporting, otherwise required by Section 404(b) of the Sarbanes-Oxley Act of 2002, this exemption will no longer be available to us beginning with our first Annual Report on 10-K for the year in which we cease to be an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act enacted in April 2012, or the JOBS Act. If we or our independent registered public accounting firm discover a material weakness in the future, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price. In addition, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business. To the extent any material weaknesses in our internal control over financial reporting are identified in the future, we could be required to expend significant management time and financial resources to correct such material weaknesses or to respond to any resulting regulatory investigations or proceedings

Our ability to use net operating losses to reduce future tax payments may be limited by provisions of the Internal Revenue Code, and may be subject to further limitation as a result of future transactions. Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, contain rules that limit the ability of a company that undergoes an ownership change, which is generally any cumulative change in ownership of more than 50% of its stock over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built-in losses recognized in the years after the ownership change. These rules generally operate by focusing on ownership changes



## Table of Contents

involving stockholders who directly or indirectly own 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards is equal to the product of the applicable long-term tax exempt rate and the value of the company's stock immediately before the ownership change. As a result, we may be unable to offset our taxable income with net operating losses, or our tax liability with credits, before these losses and credits expire.

In addition, it is possible that future transactions (including issuances of new shares of our common stock and sales of shares of our common stock) will cause us to undergo one or more additional ownership changes. In that event, we generally would not be able to use our net operating losses from periods prior to this ownership change to offset future taxable income in excess of the annual limitations imposed by Sections 382 and 383 and those attributes that are already subject to limitations (as a result of our prior ownership changes) may be subject to more stringent limitations. The requirements of being a public company may strain our resources and divert management's attention from other aspects of our business.

We are subject to a wide variety of rules and regulations as a public reporting company. The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, the Sarbanes-Oxley Act and the rules implemented by the SEC and the NASDAQ Global Market impose significant regulatory requirements on public companies, including specific corporate governance practices. For example, the listing requirements of the NASDAQ Global Market require that we satisfy certain corporate governance requirements relating to independent directors, audit and compensation committees, distribution of annual and interim reports, stockholder meetings, stockholder approvals, solicitation of proxies, conflicts of interest, stockholder voting rights and codes of conduct. Our management and other personnel are required to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly. As a public company, being subject to these rules and regulations makes it more difficult and more expensive for us to obtain director and officer liability insurance, and in the future, we may be required to accept reduced policy limits and coverage or incur substantial additional costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

These rules and regulations also contain requirements that apply to manufacturers of products incorporating specified minerals. The Dodd-Frank Act requires public companies to report on their use of so-called conflict minerals originating from the Democratic Republic of Congo or its nine immediate neighbors. Certain minerals commonly used in semiconductors are on the list of conflict minerals, and additional minerals may be added to the list in the future. Compliance with these rules, which will require us to disclose our use of these minerals and may require us to obtain an annual audit of our sourcing and the chain of custody of these minerals, will be time-consuming and costly.

We may not be able to raise additional capital to execute on our current or future business opportunities on favorable terms, if at all, or without dilution to our stockholders.

We believe that our existing cash and cash equivalents available credit facilities and cash flows from our operating activities, will be sufficient to meet our anticipated cash needs for at least the next 12 months. However, we may need to raise additional capital to execute on our current or future business strategies, including to:

- invest in our research and development efforts by hiring additional technical and other personnel;
- expand our operations into new product markets and new geographies;
- acquire complementary businesses, products, services or technologies; or
- otherwise pursue our strategic plans and respond to competitive pressures.

We do not know what forms of financing, if any, will be available to us. If financing is not available on acceptable terms, if and when needed, our ability to fund our operations, expand our research and development, sales and marketing functions, develop and enhance our products, respond to unanticipated events, including unanticipated opportunities, or otherwise respond to competitive pressures would be significantly limited. In any such event, our business, financial condition and results of operations could be materially harmed, and we may be unable to continue our operations. Moreover, if we raise additional funds through the issuance of equity or convertible debt securities, the

percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders.

Table of Contents

Natural disasters, terrorist or cyber attacks, or other catastrophic events could harm our operations.

Our worldwide operations could be subject to natural disasters and other business disruptions, which could harm our future revenue and financial condition and increase our costs and expenses. For example, our corporate headquarters in Petaluma, California is located near major earthquake fault lines. Further, a terrorist attack, including one aimed at energy or communications infrastructure suppliers or our web-based monitoring service, could hinder or delay the development and sale or performance of our products. In the event that an earthquake, tsunami, typhoon, terrorist or cyber attack, or other natural, manmade or technical catastrophe were to destroy any part of our facilities or those of our contract manufacturer, destroy or disrupt vital infrastructure systems or interrupt our operations or services for any extended period of time, our business, financial condition and results of operations would be materially adversely affected.

The market price of our common stock may be volatile or may decline regardless of our operating performance.

The market price of our common stock has been and could be subject to wide fluctuations in response to, among other things, the risk factors described in this section of this Annual Report on Form 10-K, and other factors beyond our control, such as fluctuations in the valuation of companies perceived by investors to be comparable to us.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions, such as recessions, interest rate changes or international currency fluctuations, may negatively affect the market price of our common stock. In the past, many companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may become the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business. Our financial results may vary significantly from quarter to quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter to quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including:

- fluctuations in demand for our products;
- the timing, volume and product mix of sales of our products, which may have different average selling prices or profit margins;
- changes in our pricing and sales policies or the pricing and sales policies of our competitors;
- our ability to design, manufacture and deliver products to our customers in a timely and cost-effective manner and that meet customer requirements;
- our ability to manage our relationships with our contract manufacturers, customers and suppliers;
- quality control or yield problems in our manufacturing operations;
- the anticipation, announcement or introductions of new or enhanced products by our competitors and ourselves;
- reductions in the retail price of electricity;
- changes in laws, regulations and policies applicable to our business and products, particularly those relating to government incentives for solar energy applications;
- unanticipated increases in costs or expenses;
- the amount and timing of operating costs and capital expenditures related to the maintenance and expansion of our business operations;
- the impact of government-sponsored programs on our customers;
- our exposure to the credit risks of our customers, particularly in light of the fact that some of our customers are relatively new entrants to the solar market without long operating or credit histories;
- our ability to estimate future warranty obligations due to product failure rates, claim rates or replacement costs;
- our ability to forecast our customer demand, manufacturing requirements and manage our inventory;



Table of Contents

fluctuations in our gross profit;  
our ability to predict our revenue and plan our expenses appropriately; and  
fluctuations in foreign currency exchange rates.

The foregoing factors are difficult to forecast, and these, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of this revenue shortfall on our results of operations. Moreover, our results of operations may not meet our announced guidance or the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly. There can be no assurance that we will be able to successfully address these risks.

If research analysts do not publish research about our business or if they issue unfavorable commentary or downgrade our common stock, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that research analysts publish about us and our business. The price of our common stock could decline if one or more research analysts downgrade our stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more of the research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our common stock could decrease, which could cause our stock price or trading volume to decline.

Our principal stockholders, executive officers and directors own a significant percentage of our stock, and they may take actions that our stockholders may not view as beneficial.

As of February 28, 2014, our executive officers, directors, greater than 5% stockholders and entities that are affiliated with them, beneficially owned approximately 61% of our outstanding common stock. This significant concentration of share ownership may adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. Also, as a result, these stockholders, acting together, may be able to control our management and affairs and matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as mergers, consolidations or the sale of substantially all of our assets. Consequently, this concentration of ownership may have the effect of delaying or preventing a change in control, including a merger, consolidation or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if this change in control would benefit our other stockholders.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock. As of February 28, 2014, we had approximately 42.2 million shares of common stock outstanding, all of which are eligible for sale in the public market, subject in some cases to the volume limitations and manner of sale requirements of Rule 144 under the Securities Act. Sales of stock by our stockholders could have a material adverse effect on the trading price of our common stock.

Certain holders of our securities are entitled to rights with respect to the registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

We currently do not intend to pay dividends on our common stock and, consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We currently do not plan to declare dividends on shares of our common stock in the foreseeable future. In addition, the terms of our bank loan agreements restrict our ability to pay dividends. Consequently, an investor's only opportunity to achieve a return on its investment in our company will be if the market price of our common stock appreciates and the investor sells its shares at a profit.



## Table of Contents

Our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our certificate of incorporation and our bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions, including effecting changes in our management. These provisions include:

- providing for a classified board of directors with staggered, three-year terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- not providing for cumulative voting in the election of directors, which limits the ability of minority stockholders to elect directory candidates;
- authorizing our board of directors to issue, without stockholder approval, preferred stock rights senior to those of common stock, which could be used to significantly dilute the ownership of a hostile acquiror;
- prohibiting stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

requiring the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, to amend provisions of our certificate of incorporation relating to the management of our business, our board of directors, stockholder action by written consent, advance notification of stockholder nominations and proposals, forum selection and the liability of our directors, or to amend our bylaws, which may inhibit the ability of stockholders or an acquiror to effect such amendments to facilitate changes in management or an unsolicited takeover attempt;

requiring special meetings of stockholders may only be called by our chairman of the board, if any, our chief executive officer, our president or a majority of our board of directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and requiring advance notification of stockholder nominations and proposals, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

In addition, the provisions of Section 203 of the Delaware General Corporate Law may prohibit large stockholders, in particular those owning 15% or more of our outstanding common stock, from engaging in certain business combinations without approval of substantially all of our stockholders for a certain period of time.

These provisions in our certificate of incorporation, our bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

### Item 1B. Unresolved Staff Comments

None.

### Item 2. Properties

Our corporate headquarters occupy approximately 96,000 square feet in Petaluma, California under a lease that expires in April 2022 and accommodates our principal engineering, sales, marketing, operations and finance and administrative activities. In addition to our corporate headquarters in Petaluma, as of December 31, 2013, we leased office space in Boise, Idaho, Santa Clara, California, the United Kingdom, France and New Zealand. These regional facilities total approximately 136,000 square feet. At this time, we believe our facilities are adequate for our near term operational and business needs.

### Item 3. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations. We are not currently involved in any material legal proceedings. We may, however, be involved in material legal proceedings in the future. Such matters are subject to uncertainty and there can be no assurance that such legal proceedings will not have a material adverse effect on our business, results of operations, financial position or cash flows.





Table of Contents

Item 4. Mine Safety Disclosures

Not applicable.

26

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Table of Contents

## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock has been traded on The NASDAQ Global Market under the symbol "ENPH" since March 30, 2012. The following table sets forth the range of high and low sales prices per share of our common stock as reported on the NASDAQ Global Market for the periods indicated.

	Price Range	
	High	Low
Fiscal Year 2013		
First Quarter	\$6.70	\$3.50
Second Quarter	10.00	5.17
Third Quarter	8.73	5.50
Fourth Quarter	9.37	4.54
Fiscal Year 2012		
First Quarter (from March 30, 2012)	\$8.24	\$7.06
Second Quarter	9.57	4.90
Third Quarter	6.89	4.05
Fourth Quarter	4.29	1.92

## Holders

As of February 28, 2014, there were approximately 57 holders of record of our common stock.

## Dividend Policy

We have never paid any cash dividends on our common stock. We currently anticipate that we will retain any available funds to finance the growth and operation of our business and we do not anticipate paying any cash dividends in the foreseeable future. Certain present or future agreements may limit or prevent the payment of dividends on our common stock. For example, our loan and security agreement and credit agreement with Hercules and Wells Fargo, respectively, prohibit the payment of dividends.

Table of Contents

## Stock Performance Graph

This section is not "soliciting material" and is not deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934 (the Exchange Act) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

The graph depicted below shows a comparison of cumulative total stockholder returns for our common stock, the Russell 2000 and the Guggenheim Solar Index for the period from March 29, 2012 (the date before our common stock began trading on the NASDAQ Global Market) to December 31, 2013. An investment of \$100 is assumed to have been made in our common stock and in each index on March 29, 2012 and its relative performance is tracked through December 31, 2013. The information shown is historical and is not necessarily indicative of future performance.

	3/29/12	6/30/12	9/30/12	12/31/12	3/31/13	6/30/13	9/30/13	12/31/13
Enphase Energy, Inc.	\$100	\$104	\$69	\$61	\$103	\$129	\$135	\$106
Russell 2000 Index	\$100	\$96	\$101	\$102	\$114	\$117	\$129	\$140
Guggenheim Solar Index	\$100	\$74	\$67	\$75	\$77	\$111	\$158	\$165

Table of Contents

## Item 6. Selected Consolidated Financial Data

The information set forth below for the five years ended December 31, 2013 is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and the consolidated financial statements and related notes thereto included in Item 8, Consolidated Financial Statements and Supplementary Data, of this Annual Report on Form 10-K to fully understand the factors that may affect the comparability of the information presented below.

	Year Ended December 31,				
	2013	2012	2011	2010	2009
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Net revenues	\$232,846	\$216,678	\$149,523	\$61,661	\$20,194
Cost of revenues <sup>(1)</sup>	165,430	161,390	120,454	55,159	23,223
Gross profit (loss)	67,416	55,288	29,069	6,502	(3,029)
Operating expenses:					
Research and development	34,524	35,601	25,099	14,296	8,411
Sales and marketing	31,080	25,973	17,454	6,558	2,651
General and administrative	23,970	24,875	15,228	6,365	2,603
Total operating expenses	89,574	86,449	57,781	27,219	13,665
Loss from operations	(22,158)	(31,161)	(28,712)	(20,717)	(16,694)
Other income (expense), net:					
Interest expense	(2,055)	(6,436)	(3,006)	(914)	(356)
Other income (expense)	(837)	30	(572)	(146)	125
Total other income (expense), net	(2,892)	(6,406)	(3,578)	(1,060)	(231)
Loss before income taxes	(25,050)	(37,567)	(32,290)	(21,777)	(16,925)
Provision for income taxes	(863)	(651)	—	—	—
Net loss attributable to common stockholders	\$(25,913)	\$(38,218)	\$(32,290)	\$(21,777)	\$(16,925)
Net loss per share attributable to common stockholders, basic and diluted	\$(0.62)	\$(1.24)	\$(25.73)	\$(28.96)	\$(25.92)
Shares used in computing net loss per share attributable to common stockholders, basic and diluted	41,647	30,740	1,255	752	653

(1) See Note 5 to the Consolidated Financial Statements for a description of changes in estimates related to warranty expense in 2013, 2012 and 2011.

	As of December 31,				
	2013	2012	2011	2010	2009
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$38,190	\$45,294	\$51,524	\$39,993	\$8,642
Total assets	116,669	122,291	106,242	59,504	20,947
Term loans	8,677	11,061	14,677	6,903	411
Total stockholders' equity	40,206	56,655	13,974	38,481	13,627
Additional Data:					
Working capital	\$57,144	\$61,143	\$29,417	\$39,753	\$11,004
Gross margin percentage	29.0	% 25.5	% 19.4	% 10.5	% (15.0%)



## Table of Contents

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

#### Forward-Looking Statements

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements reflecting our current expectations and involves risks and uncertainties. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend," "potential" or "continue" or the negative of these terms or comparable terminology. For example, statements regarding our expectations as to future financial performance, expense levels and liquidity sources are forward-looking statements. Our actual results and the timing of events may differ materially from those discussed in our forward-looking statements as a result of various factors, including those discussed below and those discussed in the section entitled "Risk Factors" and elsewhere in this report.

#### Overview

We deliver microinverter technology for the solar industry that increases energy production, simplifies design and installation, improves system uptime and reliability, reduces fire safety risk and provides a platform for intelligent energy management. We were founded in March 2006 and have grown rapidly to become the market leader in the microinverter category. Since our first commercial shipment in mid-2008, we have sold approximately 4.7 million microinverters as of December 31, 2013, which represents over 1.2 gigawatt (DC). We sell our products in the United States, Canada, the United Kingdom, France, the Benelux region, certain other European markets and Australia.

We sell our microinverter systems primarily to distributors who resell them to solar installers. We also sell directly to large installers and through original equipment manufacturers ("OEMs") and strategic partners. Historically, revenues generated from the U.S. market have represented more than 80% of our business, with the remainder from Canada, Europe and Australia.

We have experienced significant revenue growth since our first commercial shipment in mid-2008. Our net revenues were \$232.8 million, \$216.7 million and \$149.5 million for 2013, 2012 and 2011, respectively, which reflects deeper market penetration and broader acceptance of microinverter technology. We incurred net losses of \$25.9 million, \$38.2 million and \$32.3 million for 2013, 2012 and 2011, respectively, as we invested significant resources to develop new product offerings and focused on critical research and development activities required to reduce product costs, increase performance and foster innovation. We also expanded our operations into new product markets and geographies and invested in our operational infrastructure to support anticipated growth.

Our full-time employee headcount has grown from 298 at December 31, 2011 to 398 at December 31, 2013. We do not expect similar growth rates in headcount in the near term. We believe the investments we have made in our corporate infrastructure will enable us to deliver higher levels of net revenues without proportionate increases in research and development, sales and marketing, and general and administrative expenses.

#### Components of Consolidated Statements of Operations

##### Net Revenues

We generate net revenues from sales of our microinverter systems, which include microinverter units, an Envoy communications gateway device, and our Enlighten web-based monitoring service. We sell to distributors, large installers, OEMs and strategic partners.

Our revenue is affected by changes in the volume and average selling prices of our microinverter systems, driven by supply and demand, sales incentives, and competitive product offerings. Our revenue growth is dependent on our continual development and introduction of new products to meet the changing technology and performance requirements of our customers, the diversification and expansion of our revenue base, and our ability to market our products in a manner that increases awareness for microinverter technology and differentiates us in the marketplace.

##### Cost of Revenues and Gross Profit

Cost of revenues is comprised primarily of product costs, warranty, manufacturing personnel and logistics costs, depreciation and amortization of test equipment and hosting services costs. Our product costs are impacted by technological innovations, such as advances in semiconductor integration and new product introductions, economies of scale resulting in

30

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## Table of Contents

lower component costs, and improvements in production processes and automation. Certain costs, primarily personnel and depreciation and amortization of test equipment, are not directly affected by sales volume.

We outsource our manufacturing to third-party contract manufacturers and generally negotiate product pricing with them on a quarterly basis. We believe our contract manufacturing partners have sufficient production capacity to meet the growing demand for our products for the foreseeable future. However, shortages in the supply of certain key raw materials could adversely affect our ability to meet customer demand for our products.

In addition, third parties, including one of our contract manufacturers, serve as our logistics providers by warehousing and delivering our products in North America, Europe and Australia.

Gross profit may vary from quarter to quarter and is primarily affected by our average selling prices, product cost, product mix, warranty costs (including changes in estimates) and sales volume fluctuations resulting from seasonality.

### Operating Expenses

Operating expenses consist of research and development, sales and marketing and general and administrative expenses. Personnel-related costs are the most significant component of each of these expense categories and include salaries, benefits, payroll taxes, recruiting costs, sales commissions and stock-based compensation. We believe the investments we have made in our corporate infrastructure will enable us to deliver higher levels of net revenues without proportionate increases in research and development, sales and marketing, and general and administrative expenses.

Research and development expense includes personnel-related expenses such as salaries, stock-based compensation and employee benefits. Research and development employees are engaged in the design and development of power electronics, semiconductors, powerline communications and networking and software functionality. Research and development expense also includes third-party design and development costs, testing and evaluation costs, depreciation expense and other indirect costs. We devote substantial resources in ongoing research and development programs that focus on enhancements to and cost efficiencies in our existing products and timely development of new products that utilize technological innovation to drive down product costs, improve functionality, and enhance reliability. We intend to continue to invest substantial resources in our research and development efforts because we believe they are critical to maintaining our competitive position.

Sales and marketing expense consists primarily of personnel-related expenses such as salaries, commissions, stock-based compensation, employee benefits and travel. It also includes trade shows, marketing, customer support and other indirect costs. We expect to continue to make the necessary investments to enable us to execute our strategy to increase our market penetration geographically and enter into new markets by expanding our customer base of distributors, large installers, OEMs and strategic partners. Historically, substantially all of our sales have been in the United States and Canada. We began selling into France, Italy and the Benelux region in the fourth quarter of 2011 and commenced volume shipments to such regions in the second quarter of 2012. In addition, we opened a sales office in the United Kingdom during the second quarter of 2012 and began shipping products to the United Kingdom in the third quarter of 2012. In late 2013, we opened a sales office and began shipping products in Australia. We believe the investments we have made in sales and marketing to date will enable us to deliver higher levels of net revenues without proportionate increases from current levels of sales and marketing expenses. However, we expect to continue to expand the geographic reach of our product offerings and explore new sales channels in addressable markets in the future.

General and administrative expense consists primarily of salaries, stock-based compensation and employee benefits for personnel related to our executive, finance, human resources, information technology and legal organizations.

General and administrative expense also includes facilities costs and fees for professional services. Professional services consist primarily of outside legal, accounting and information technology consulting costs. We believe the investments we have made in our corporate infrastructure to date will enable us to deliver higher levels of net revenues without proportionate increases from current levels of general and administrative expenses.

### Other Income (Expense), Net

Other income (expense), net includes interest income on invested cash balances and interest expense on amounts outstanding under our credit and convertible note facilities and non-cash interest expense related to the amortization of



debt discounts and deferred financing costs. Other income (expense), net also includes mark-to-market adjustments to record our preferred stock warrants at fair value prior to our initial public offering of our common stock, or IPO, which were issued in conjunction with credit facilities, as well as losses or gains on conversion of non-U.S. dollar transactions into U.S. dollars and foreign currency forward contracts.

Table of Contents

## Provision for Income Taxes

We are subject to income taxes in the countries where we sell our products. Historically, we have primarily been subject to taxation in the United States because we have sold the vast majority of our products to customers in the United States. As we have expanded the sale of products to customers outside the United States, we have become subject to taxation based on the foreign statutory rates in the countries where these sales took place. As sales in foreign jurisdictions increase in the future, our effective tax rate may fluctuate accordingly. We have not recorded any U.S. federal or state income tax provision for any of the periods presented because we have experienced operating losses since inception. A provision for income taxes of \$0.9 million and \$0.7 million has been recognized for 2013 and 2012, respectively, related to our foreign operations. Due to the history of losses we have generated since inception, we have recorded a full valuation allowance on our net deferred tax assets.

## Summary Consolidated Statements of Operations

The following table sets forth a summary of our consolidated statements of operations for the periods presented (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Net revenues	\$232,846	\$216,678	\$149,523
Cost of revenues	165,430	161,390	120,454
Gross profit	67,416	55,288	29,069
Operating expenses:			
Research and development	34,524	35,601	25,099
Sales and marketing	31,080	25,973	17,454
General and administrative	23,970	24,875	15,228
Total operating expenses	89,574	86,449	57,781
Loss from operations	(22,158)	(31,161)	(28,712)
Other expense, net	(2,892)	(6,406)	(3,578)
Loss before income taxes	(25,050)	(37,567)	(32,290)
Provision for income taxes	(863)	(651)	—
Net loss	\$(25,913)	\$(38,218)	\$(32,290)

## Comparison of 2013, 2012 and 2011

## Net Revenues

	Year Ended December 31,		Change in		Year Ended December 31,		Change in			
	2013	2012	\$	%	2012	2011	\$	%		
	(In thousands, except percentages)				(In thousands, except percentages)					
Net revenues	\$232,846	\$216,678	\$16,168	7	%	\$216,678	\$149,523	\$67,155	45	%

2013 Compared to 2012. Net revenues increased by 7% to \$232.8 million in 2013 compared to 2012. The increase in net revenues was primarily due to the increase in microinverter units shipped as well as a larger mix of microinverter accessories. The number of microinverter units sold increased by 8% from approximately 1,510,000 units in 2012, to approximately 1,625,000 units in 2013. Substantially all units shipped in both years consisted of our third generation product. During 2013, we continued to experience a decline in the average selling price of our microinverters. The decline in average selling price reflected, and was consistent with, recent trends in the solar industry.



Table of Contents

2012 Compared to 2011. Net revenues increased by 45% to \$216.7 million in 2012 compared to 2011. The increase in net revenues was primarily due to the increase in microinverter units shipped. The number of microinverter units sold increased by 51% from approximately 1,002,000 units in 2011, to approximately 1,510,000 units in 2012. The overall increase in units sold was attributable primarily to sales of our third generation microinverter, which was introduced during the second quarter of 2011. In addition, the increase in unit sales was driven by deeper penetration of our existing customer base, the addition of new customers, and broader acceptance of our products resulting from, among other factors, investments made in sales and marketing. During 2012, we continued to experience a decline in the average selling price of our microinverters. The decline in average selling price reflected, and was consistent with, recent trends in the solar industry.

## Cost of Revenues and Gross Margin

	Year Ended December 31, 2013				Year Ended December 31, 2012				Year Ended December 31, 2011			
			Change in				Change in				Change in	
	2013	2012	\$	%	2012	2011	\$	%	2012	2011	\$	%
	(In thousands, except percentages)											
Cost of revenues	\$ 165,430	\$ 161,390	\$ 4,040	3 %	\$ 161,390	\$ 120,454	\$ 40,936	34 %	\$ 161,390	\$ 120,454	\$ 40,936	34 %
Gross profit	67,416	55,288	12,128	22 %	55,288	29,069	26,219	90 %	55,288	29,069	26,219	90 %
Gross margin	29.0 %	25.5 %			25.5 %	19.4 %			25.5 %	19.4 %		

2013 Compared to 2012. Cost of revenues increased by 3% in 2013, as compared to 2012, while net revenues increased by 7%. The increase in cost of revenues was primarily due to an increase in the number of microinverter units sold to customers, consistent with the overall increase in net revenues as described above. Gross margin increased by 3.5 percentage points to 29.0% in 2013, as compared to 25.5% in 2012, primarily due to a lower cost per microinverter unit and larger mix of sales from microinverter accessories. While our third generation product represented substantially all of 2013 and 2012 sales, we were able to achieve lower per unit costs in 2013, as compared to 2012, due to production efficiencies gained through experience with the manufacturing process, which had a favorable impact on gross margin. Costs of revenues in 2013 and 2012 included warranty expense of \$10.3 million and \$7.6 million, respectively, resulting from net changes in estimates, which reduced gross margin by approximately 4.4 and 3.5 percentage points, respectively. See Note 5 to the Consolidated Financial Statements.

2012 Compared to 2011. Cost of revenues increased by 34% in 2012, as compared to 2011. The increase in cost of revenues was primarily due to an increase in the number of microinverter units sold to customers, consistent with the overall increase in net revenues as described above. Gross margin increased by 6.1 percentage points to 25.5% in 2012, as compared to 19.4% in 2011. The increase was primarily driven by a 8 percentage point increase from a larger mix of our higher-margin third generation microinverter, which has a lower per unit manufacturing cost than our second generation microinverter. The lower per unit cost was achieved primarily through design enhancements, which resulted in a higher level of semiconductor integration, and improved efficiencies on increased production volume. In addition, gross margin improved by 2 percentage points in 2012 as a result of a reduction in usage of expedited air-freight for finished goods due to improvements in delivery scheduling. These increases were partially offset by a 4 percentage point reduction to gross margin due to a net increase in warranty expense primarily attributable to changes in estimates to warranty obligations associated with our previous generation products. See Note 5 to the Consolidated Financial Statements.

## Research and Development

	Year Ended December 31, 2013				Year Ended December 31, 2012				Year Ended December 31, 2011			
			Change in				Change in				Change in	
	2013	2012	\$	%	2012	2011	\$	%	2012	2011	\$	%

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	(In thousands, except percentages)			(In thousands, except percentages)					
Research and development	\$34,524	\$35,601	\$(1,077 )	(3 )%	\$35,601	\$25,099	\$10,502	42	%
Percentage of net revenues	15	% 16	%		16	% 17	%		

2013 Compared to 2012. Research and development expenses decreased by \$1.1 million in 2013 as compared to 2012, primarily due to a \$1.6 million decrease in outside contract services, offset by a \$0.3 million increase in depreciation and amortization related to research and development equipment and a \$0.2 million increase in personnel-related costs.

2012 Compared to 2011. Research and development expenses increased by \$10.5 million in 2012 as compared to 2011, primarily due to a \$7.8 million increase in personnel-related costs as a result of increases in research and development headcount. The increase in headcount reflects our continuing investment in enhancements of existing products, as well as efforts to bring new products to market. In addition, the use of outside services for the development of new products and depreciation and

Table of Contents

amortization related to research and development equipment increased by \$1.6 million and \$1.0 million, respectively, as compared to 2011.

## Sales and Marketing

	Year Ended December 31,					Year Ended December 31,				
	2013	2012	\$	%		2012	2011	\$	%	
	(In thousands, except percentages)					(In thousands, except percentages)				
Sales and marketing	\$31,080	\$25,973	\$5,107	20	%	\$25,973	\$17,454	\$8,519	49	%
Percentage of net revenues	13	% 12	%			12	% 12	%		

2013 Compared to 2012. Sales and marketing expenses increased by \$5.1 million in 2013 as compared to 2012, primarily due to increases in customer service headcount and operations in domestic and international markets. Personnel-related costs increased by \$4.0 million, which included a \$0.6 million increase in non-cash stock-based compensation. Costs associated with establishing our presence in Australia contributed an additional \$1.8 million to the increase in 2013. The increase was partially offset by a decrease in marketing expenses primarily attributable to lower expenditures on trade shows of \$0.6 million.

2012 Compared to 2011. Sales and marketing expenses increased by \$8.5 million in 2012 as compared to 2011, primarily due to increases in sales and marketing headcount to support higher sales volumes and international expansion. Personnel-related costs increased by \$6.5 million, which included a \$2.4 million increase due to additions in sales and marketing headcount for international locations. Costs related to trade shows, the use of outside services and facilities related costs contributed an additional \$1.0 million to the increase in 2012. In addition, bad debt expense increased by \$0.9 million in 2012 as compared to 2011.

## General and Administrative

	Year Ended December 31,					Year Ended December 31,				
	2013	2012	\$	%		2012	2011	\$	%	
	(In thousands, except percentages)					(In thousands, except percentages)				
General and administrative	\$23,970	\$24,875	\$(905)	(4)	%	\$24,875	\$15,228	\$9,647	63	%
Percentage of net revenues	10	% 11	%			11	% 10	%		

2013 Compared to 2012. General and administrative expenses decreased by \$0.9 million in 2013 as compared to 2012, primarily as a result of decreased use of outside consultants and professional services. The decrease in general and administrative expenditures reflected our ongoing expense management measures.

2012 Compared to 2011. General and administrative expenses increased by \$9.6 million in 2012 as compared to 2011, primarily due to a \$3.6 million increase in personnel-related costs as a result of increases in general and administrative headcount and a \$2.8 million increase in accounting, legal and other professional services incurred to assist us with building an infrastructure to support operating as a public company. In addition, depreciation and amortization and facilities costs contributed \$2.4 million to the increase due to increased capital expenditures and facilities costs incurred to support our increased headcount and growth of our business. The remaining \$0.8 million of the increase was attributable to insurance and other corporate expenses.

Other Income (Expense), Net

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	Year Ended December 31,		Change in		Year Ended December 31,		Change in	
	2013	2012	\$	%	2012	2011	\$	%
Other income (expense), net	\$ (2,892 )	\$ (6,406 )	\$ 3,514	(55 )%	\$ (6,406 )	\$ (3,578 )	\$ (2,828 )	79 %

(In thousands, except percentages)

2013 Compared to 2012. Other expense decreased by \$3.5 million in 2013 as compared to 2012. The decrease was primarily attributable to the \$2.8 million charge recorded as interest expense in 2012 upon conversion of our convertible facility at our IPO. In addition, interest expense related to outstanding debt balances was lower in 2013, as compared to 2012, due to lower average debt levels.

Table of Contents

2012 Compared to 2011. Other expense increased by \$2.8 million in 2012 as compared to 2011. The increase was attributable to a \$3.4 million increase in interest expense, of which \$2.8 million was from write-offs of unamortized debt issuance costs and debt discount as a result of the early extinguishment of convertible debt and term loans and the termination of a revolving line of credit. In addition, foreign currency losses contributed \$0.4 million to the increase. The increases were partially offset by a \$0.8 million decrease in the fair value of our convertible preferred stock warrant prior to the liability being reclassified as equity upon our IPO.

## Liquidity and Capital Resources

Prior to our IPO in April 2012, we funded our operations primarily through private placements of convertible preferred stock and convertible notes, and proceeds from term loans. On April 4, 2012, we completed our IPO, in which we issued and sold 10,315,151 shares of our common stock and received net proceeds of approximately \$53.8 million. As of December 31, 2013, we had \$38.2 million in cash and cash equivalents, which are held primarily in general checking accounts, and \$57.1 million in working capital. Substantially all of our cash and cash equivalents are held in the United States, with the remainder held in various foreign subsidiaries.

The following table summarizes our cash flows for the periods presented (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Net cash used in operating activities	\$(872	) \$(44,645	) \$(367
Net cash used in investing activities	(6,257	) (12,990	) (14,662
Net cash (used in) provided by financing activities	(58	) 51,436	26,482

## Net Cash Used in Operating Activities

We have experienced negative operating cash flows as we invested significant resources to develop new product offerings and focused on critical research and development activities required to reduce product costs, increase performance and foster innovation. In addition, we used cash to expand our operations into new product markets and geographies and invested in our operational infrastructure to support the growth of our business.

For 2013, net cash used in operating activities was \$0.9 million. Our net loss of \$25.9 million was substantially offset by non-cash charges and net changes in operating assets and liabilities. Non-cash items included \$7.0 million of depreciation and amortization, \$6.9 million of stock-based compensation, a provision for doubtful accounts of \$0.7 million and \$0.4 million of non-cash interest expense. In addition, cash provided by net changes in operating assets and liabilities was 10.0 million.

Sources of cash totaled \$16.4 million resulting from an increase of \$7.6 million in accounts payable, accrued liabilities and warranty obligations, an increase of \$5.6 million in deferred revenues and a \$3.2 million decrease from lower inventory levels. The \$7.6 million increase in accounts payable, accrued liabilities and warranty obligations was primarily attributable to a \$9.1 million increase in warranty obligations, partially offset by a reduction in accounts payable and accrued liabilities corresponding with reduced inventory purchases. The increase in deferred revenue of \$5.6 million relates to our Enlighten web-based monitoring service revenues. The decrease in inventories was the result of improved working capital management. Uses of cash included a \$5.0 million increase in accounts receivable and a \$1.4 million increase in prepaid expenses and other assets. The increase in accounts receivable was primarily due to higher sales in the fourth quarter of 2013 as compared to the same period in 2012.

For 2012, net cash used in operating activities was \$44.6 million primarily resulting from a net loss of \$38.2 million. The net loss was partially offset by non-cash items including, depreciation and amortization of \$5.6 million, stock-based compensation of \$4.8 million and interest expense of \$4.8 million. In addition, the effect of changes in net operating assets and liabilities resulted in the use of cash totaling \$22.2 million.



The primary use of cash from changes in net operating assets and liabilities in 2012 was attributable to an \$18.6 million decrease in deferred revenues, which was primarily due to shipments of products during 2012 for which upfront payments of \$23.0 million were received from customers in December 2011, as discussed below. In addition, other uses of cash from changes in net operating assets and liabilities included an \$11.0 million increase in accounts receivable and an \$8.6 million increase in inventory-related purchases, both consistent with the overall growth of our business in 2012 as compared to 2011. Offsetting these uses of cash was an increase in accounts payable of \$16.8 million, which was also driven by the growth of our business.

## Table of Contents

For 2011, notwithstanding a net loss of \$32.3 million, net cash used in operating activities was \$0.4 million, primarily due to a \$25.4 million increase in deferred revenues. In December 2011, we entered into several agreements to sell microinverters to customers, with product delivery in 2012. These agreements were due, in part, to the anticipated expiration of certain government incentives for investments in renewable energy projects on December 31, 2011. Prior to December 31, 2011, we received \$29.4 million in cash in advance from these customers, of which \$6.4 million and \$23.0 million were recorded as revenues and deferred revenues, respectively. Our net loss included non-cash charges in the form of depreciation and amortization of \$3.0 million, stock-based compensation of \$2.1 million and non-cash interest expense of \$1.8 million related to the amortization of debt discounts and deferred financing costs. Changes in working capital items other than deferred revenues used \$1.0 million of operating cash flow and consisted of increases in accounts receivable, inventory and prepaid and other assets offset by increases in accounts payable, accrued liabilities and warranty obligations.

### Net Cash Used in Investing Activities

Net cash used in investing activities primarily relates to capital expenditures to support our growth.

For 2013, net cash used in investing activities of \$6.3 million included purchases of test and assembly equipment and the development of software for internal use.

For 2012, net cash used in investing activities of \$13.0 million included purchases of test equipment and expenditures on leasehold improvements and furniture and fixtures in connection with our relocation to a new headquarter facility.

For 2011, net cash used in investing activities of \$14.7 million included purchases of test equipment and the development of software for internal use.

### Net Cash Provided by Financing Activities

For 2013, net cash used by financing activities was insignificant. Cash received from common stock issuance pursuant to our equity incentive plans was \$2.4 million. These inflows of cash were offset by principal repayments of term loans of \$2.4 million.

For 2012, net cash provided by financing activities primarily consisted of net proceeds of \$56.4 million received from our IPO, after deducting underwriting discounts and commissions and other offering costs paid during 2012. Cash used in financing activities consisted of \$14.1 million in principal repayments of term loans and \$1.0 million in financing costs associated with entering into new credit facilities in November 2012. This was partially offset by \$10.0 million in proceeds from term loan borrowings.

For 2011, net cash provided by financing activities consisted of \$19.7 million in net proceeds received from the issuance of our convertible notes, \$9.3 million in net proceeds from an equipment financing facility and term loans, and \$1.9 million from the sale of common stock partially offset by \$2.6 million in direct costs incurred in connection with the preparation of our registration statement and \$2.0 million related to payments on our term loans and capital lease obligations.

### Debt Obligations

Our debt obligations are summarized below. As of December 31, 2013, we were in compliance with all required financial covenants of our debt facilities.

**Revolving Credit Facility**—We have a \$50.0 million revolving credit facility (the “Revolver”) with Wells Fargo Bank, N.A. (“Wells Fargo”), which had a maturity date of November 7, 2015. On February 14, 2014, we entered into an

amendment which granted an automatic extension of the maturity date from November 7, 2015 to November 7, 2016, provided we have not borrowed any amounts under the Additional Term Loans made available by Hercules Technology Growth Capital, Inc. ("Hercules") as described below, or otherwise restructure the Additional Term Loans to the satisfaction of Wells Fargo. The amount of loans available to be drawn under the Revolver is subject to a borrowing base calculation that limits availability to a percentage of eligible domestic accounts receivable plus a percentage of the value of eligible domestic inventory, less certain reserves. Wells Fargo and Hercules are parties to an intercreditor agreement, pursuant to which Hercules has a first lien on certain of our assets and a second priority on our other assets. Subject to the intercreditor agreement, loans under the Revolver are secured by a pledge of substantially all of our assets other than intellectual property. Loans under the Revolver bear interest in cash at an annual rate equal to, at our option, either LIBOR or a "base rate" that is comprised of, among other things, the prime rate, plus a margin that is between 1.5% and 4.25% depending on the currency borrowed and the specific term of repayment. The Revolver contains customary affirmative and negative covenants and events of default, and requires us to maintain at least \$15.0 million of liquidity at all times, of which at least \$8.0 million (\$5.0 million in the case the

Table of Contents

maturity date is November 7, 2016) must be undrawn availability. To date, we have not drawn on the Revolver and approximately \$22.4 million was available for borrowing as of December 31, 2013 based on eligible accounts receivable and inventory balances pursuant to the agreement.

**Term Loans**—We have a loan and security agreement with Hercules, pursuant to which we borrowed \$7.4 million (the "Initial Term Loan"). In addition, we may borrow an additional \$15.6 million in term loans (the "Additional Term Loans"), which must be drawn, if at all, not later than March 31, 2014. To date, we have not, and do not intend to borrow any Additional Term Loans prior to its impending expiration on March 31, 2014 as we believe the amounts available under the Revolver expiring in November 2015 (or November 2016 provided we do not borrow any amounts under the Additional Term Loans) will be sufficient to meet our liquidity needs through fiscal 2014. We used the proceeds of the Initial Term Loan to replenish cash on hand, which had previously been used to repay the approximately \$7.5 million in other outstanding term loans. Loans under the Hercules facility bear interest at an annual rate equal to the higher of (i) the prime rate plus 8.25% or (b) 11.5%. All loans under the Hercules facility will mature on August 1, 2016. Interest is payable in cash on a monthly basis, and the loans will amortize in equal monthly installments commencing on March 1, 2014 for the Initial Term Loan. In addition, the facility includes a \$0.6 million end of term charge due on August 1, 2016. Prepayments of loans under the facility are subject to early payment penalties. Loans under the Hercules facility are secured by a pledge of substantially all of our assets other than intellectual property. The Hercules facility does not include any financial covenants. As of December 31, 2013, the outstanding principal balance under the Term Loans was \$7.4 million, which solely relates to borrowings under the Initial Term Loan.

**Equipment Financing Facility**—The Company has an equipment financing facility with Hercules. The equipment financing facility has a variable interest rate set at the higher of 5.75% above the prime lending rate and 9.0% annually and expires July 1, 2014. This facility is secured by the financed equipment and restricts our ability to pay dividends and take on certain types of additional liens. As of December 31, 2013, the outstanding principal balance under the equipment financing facility was \$1.3 million.

**Operating and Capital Expenditure Requirements**

Our future capital requirements may vary materially in the future and will depend on many factors, including, but not limited to, our rate of revenue growth, the expansion of our sales and marketing activities and the timing and extent of spending to support product development efforts and other costs necessary to support our strategy.

We believe our current cash and cash equivalents of \$38.2 million as of December 31, 2013, together with borrowings expected to be available under our Revolver with Wells Fargo, will be adequate to fund our debt obligations as well as our planned capital expenditures and working capital requirements over the next 12 months.

If additional sources of liquidity were needed, we may consider new debt or equity offerings, but there is no assurance that such transactions could be consummated on acceptable terms or at all. Failure to raise sufficient capital when needed could have a material adverse effect on our business, results of operations and financial position.

**Contractual Obligations**

The following table summarizes our outstanding contractual obligations as of December 31, 2013:

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	4-5 Years	More Than 5 Years
	(in thousands)				
Term Loans	\$8,708	\$3,538	\$5,170	\$—	\$—
Interest payments on term loans	1,912	801	1,111	—	—
Operating leases	14,097	1,672	3,515	3,154	5,756

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Purchase commitments under agreements (1)	87,551	27,339	34,622	25,590	—
Total	\$112,268	\$33,350	\$44,418	\$28,744	\$5,756

Represents amounts associated with our contract manufacturers that are non-cancelable. Such purchase (1) commitments are based on our forecasted manufacturing requirements and typically provide for fulfillment within agreed upon lead-

37

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## Table of Contents

times and/or commercially standard lead-times for the particular part or product. The timing and amount of payments represent our best estimate and may change due to changing business needs and other factors. Certain agreements specify future quantities and pricing of products to be supplied by our contract manufacturers for periods up to seven years. Of the \$87.6 million included in purchase commitments, \$72.5 million are cancelable; however if canceled, the agreement requires us to pay cancellation penalties of up to \$5.6 million.

As of December 31, 2013, the liability recorded for uncertain tax positions, including associated interest and penalties, was approximately \$0.4 million. Since the ultimate amount and timing of cash settlements cannot be predicted due to the high degree of uncertainty, liabilities for uncertain tax positions are excluded from the contractual obligations table (see Note 11 to the Consolidated Financial Statements).

### Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements including the use of structured finance, special purpose entities or variable interest entities.

### Critical Accounting Policies and Significant Management Estimates

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S., or GAAP. Note 2 to our consolidated financial statements describes the significant accounting policies and methods used in the preparation of our consolidated financial statements, which requires management to make assumptions and estimates about future events, and apply judgments that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors that management believes to be relevant at the time our consolidated financial statements are prepared. On a regular basis, we review the accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ materially from our assumptions and estimates. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We consider an accounting policy to be critical if it is important to our financial condition and results of operations, and if it entails significant judgment, subjectivity and complexity on the part of management in its application. We consider the following to be our critical accounting policies:

### Revenue Recognition

We generate revenue from sales of our microinverter systems, which include microinverter units and related accessories, an Envoy communications gateway device, and an Enlighten web-based monitoring service, to distributors, large installers, OEMs and strategic partners. Enlighten service revenue represented less than 1% of our total revenues for all periods presented.

Revenues from sales of microinverters and related accessories, and communication gateways are recognized when: (i) persuasive evidence of an arrangement exists; (ii) delivery of the products has occurred in accordance with the terms of the sales agreement and title of and risk of loss have passed to the customer; (iii) the sale price is fixed or determinable; and (iv) collection is reasonably assured. Provisions for rebates, sales incentives, and discounts to customers are accounted for as reductions in revenue in the same period the related sales are recorded.

Sales of an Envoy communications gateway device include our Enlighten web-based monitoring service. The allocation of revenue between the two deliverables is based on the best estimate of selling price determined by considering multiple factors, including internal costs, gross margin and historical pricing practices. After allocating

the overall consideration from such sale to each deliverable using the best estimate of the selling price, (i) revenue from the sale of Envoy devices is recognized upon shipment, assuming all other revenue recognition criteria have been met and (ii) revenue from the web-based monitoring service is recognized ratably over the estimated economic life of the related Envoy devices of 10 years.

#### Inventory Valuation

Inventories are valued at the lower of cost or market, on a first-in, first-out basis. Certain factors could affect the realizable value of our inventories including market and economic conditions, technological changes, new product introductions and changes in strategic direction. We consider historic usage, expected demand, anticipated sales price, effect of new product introductions, product obsolescence, customer concentrations, product merchantability and other factors when evaluating the value of inventories. Inventory write-downs are equal to the difference between the cost of inventories and their estimated fair market value.

Table of Contents

We do not believe there is a reasonable likelihood that there will be a material change in the future estimates or assumptions that we use to record inventory at the lower of cost or market. However, if estimates regarding customer demand are inaccurate or changes in technology affect demand for certain products in an unforeseen manner, we may be exposed to losses that could be material.

Warranty Obligations

Microinverters Sold Through December 31, 2013

Our warranty accrual provides for the replacement of microinverter units that fail during the product's warranty term (15 years for first and second generation microinverters and up to 25 years for third and fourth generation microinverters). On a quarterly basis, we employ a consistent, systematic and rational methodology to assess the adequacy of our warranty obligations. This assessment includes updating all key estimates and assumptions for each generation of product, based on historical results, trends and the most current data available as of the filing date. The key estimates and assumptions used in the warranty obligations are thoroughly reviewed by management on a quarterly basis. The key estimates used to estimate warranty obligations are: (1) the number of units expected to fail over time (i.e. failure rate); (2) the number of failed units expected to result in warranty claims over time (i.e. claim rate); and (3) the per unit cost of replacement units, including outbound shipping and limited labor costs, expected to be incurred to replace failed units over time (i.e. replacement cost).

**Estimated Failure Rates**—Our Quality and Reliability department has primary responsibility to determine the estimated failure rates for each generation of microinverter. To establish initial failure rate estimates for each generation of microinverter, our quality engineers use a combination of industry standard MTBF (Mean Time Between Failure) estimates for individual components contained in our microinverters, third party data collected on similar equipment deployed in outdoor environments similar to those in which our microinverters are installed, and rigorous long term reliability and accelerated life cycle testing which simulates the service life of the microinverter in a short period of time. As units are deployed into production environments, we continue to monitor product performance via our Enlighten monitoring platform. It typically takes three to nine months between the date of sale and date of end-user installation. Consequently, our ability to monitor actual failures of units sold similarly lags by three to nine months. When a microinverter fails and is returned, we perform diagnostic root cause failure analysis to understand and isolate the underlying mechanism(s) causing the failure. We then use the results of this analysis (combined with the actual, cumulative performance data collected on those units prior to failure via Enlighten) to draw conclusions with respect to how or if the identified failure mechanism(s) will impact the remaining units deployed in the installed base.

**Estimated Claim Rates**—Warranty claim rate estimates are based upon assumptions with respect to expected customer behavior over the warranty period. As the vast majority of our microinverters have been sold to end users for residential applications, we believe that warranty claim rates will be affected over time by changes in residential home ownership because we expect that subsequent homeowners are less likely to file claims than the homeowners who originally purchase the microinverters.

**Estimated Replacement Costs**—Three factors are considered in our analysis of estimated replacement cost: (1) the estimated cost of replacement microinverters; (2) the estimated cost to ship replacement microinverters to end users; and (3) the estimated labor reimbursement expected to be paid to third party installers performing replacement services for the end user. Because our warranty provides for the replacement of defective microinverters over long periods of time (either 15 or 25 years, depending on the generation of product purchased), the estimated per unit cost of current and future product generations is considered in the estimated replacement cost. Estimated costs to ship replacement units are based on observable, market-based shipping costs paid by us to third party freight carriers. We have a separate program that allows third-party installers to claim fixed-dollar reimbursements for labor costs they



incur to replace failed microinverter units for a limited time from the date of original installation. Included in our estimated replacement cost is an analysis of the number of fixed-dollar labor reimbursements expected to be claimed by third party installers over the limited offering period.

If actual failure rates, claim rates, or replacement costs differ from our estimates in future periods, changes to these estimates would be required, resulting in increases or decreases in our warranty obligations. Such increases or decreases could be material.

Changes in estimates related to warranty obligations resulted in net increases in warranty expense of \$10.3 million, \$7.6 million and \$1.8 million in 2013, 2012 and 2011, respectively. See Note 5 to the Consolidated Financial Statements.

Table of Contents

Fair Value Option for Microinverters Sold Since January 1, 2014

Our warranty obligations related to microinverters sold since January 1, 2014 provides us the right, but not the requirement, to assign our warranty obligations to a third-party. Pursuant to Accounting Standards Codification ("ASC") 820, Fair Value Measurement, such warranties are eligible to be accounted for at fair value. We expect to elect the fair value option to measure all eligible warranties associated with microinverters sold subsequent to January 1, 2014.

In addition to the key estimates of failure rates, claim rates and replacement costs described above, the fair value of warranty obligations will require the use of certain Level 3 inputs which are unobservable and significant to the overall fair value measurement. Such additional assumptions will include a discount rate based upon our credit-adjusted risk-free rate and a hypothetical profit margin and risk premium required of a hypothetical market participant to assume the obligation. Warranty obligations initially recorded at fair value (computed using an expected present value technique) at the time of sale will be subsequently re-measured to fair value at each reporting date. In addition, the fair value of the liability will be accreted over the corresponding term of the warranty of up to 25 years using the effective interest method. Any changes in fair value of the liability from period-to-period, including accretion expense, will be recognized in cost of revenues. Warranty obligations recorded at fair value are expected to be lower, as compared to our previous accounting at estimated costs, primarily due to the effects of discounting to net present value.

As of December 31, 2013, warranty obligations were \$30.4 million. Periodic adjustments necessitated by actual experience of claims and any future changes in estimates to this liability associated with sales prior to December 31, 2013 will continue to be accounted for on an undiscounted basis.

Table of ContentsItem 7A. Quantitative and Qualitative Disclosures about Market Risk  
Concentrations of Credit Risk and Major Customers

We are potentially subject to financial instrument concentration of credit risk through our cash equivalents and accounts receivables. We place our cash and cash equivalents with high quality institutions and perform periodic evaluations of their relative credit standing. Accounts receivables can be potentially exposed to a concentration of credit risk with our major customers. As of December 31, 2013, we had amounts due from two customers that represented 16% and 10% of the total accounts receivable balance. As of December 31, 2012, our two largest accounts receivable balances represented 21% and 16% of the total accounts receivable balance. In 2013, 3 customers accounted for 15%, 14% and 11% of total net revenues. In 2012, two customers accounted for 16%, and 11% of total net revenues. In 2011, three customers accounted for 17%, 11% and 10% of total net revenues.

## Foreign Currency Exchange Risk

We operate and conduct business in foreign countries where our foreign entities use the local currency as their respective functional currency and, as a result, are exposed to movements in foreign currency exchange rates. More specifically, we face foreign currency exposure from the effect of fluctuating exchange rates on payables and receivables relating to transactions that are denominated in Euros, British Pounds and Australian and New Zealand Dollars. These payables and receivables primarily arise from sales to customers and intercompany transactions. We also face currency exposure that arises from translating the results of our European, Australian and New Zealand operations, including sales and marketing and research and development expenses, to the U.S. dollar at exchange rates that have fluctuated from the beginning of a reporting period.

In June 2012, we began to utilize foreign currency forward contracts to reduce the impact of foreign currency fluctuations related to anticipated cash receipts from expected future revenues denominated in Euros and intercompany transaction gains or losses. The contracts we enter into typically have maturities of less than one year. We do not enter into derivative financial instruments for trading or speculative purposes. The foreign currency forward contracts are accounted for as derivatives whereby the fair value of the contracts is reported as other current assets or current liabilities in the accompanying consolidated balance sheets, and gains and losses resulting from changes in the fair value are reported in other income (expense), net, in the accompanying consolidated statements of operations.

The following table presents the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy at December 31, 2013 and 2012 (in thousands):

	Asset Derivatives		Liability Derivatives	
	December 31, 2013	December 31, 2012	December 31, 2013	December 31, 2012
Foreign currency forward contracts (Level 2)	\$325	\$—	\$605	\$268

The foreign currency exchange rate risk associated with our forward currency exchange contracts is limited as the exposure is substantially offset by exchange rate changes of the underlying hedged amounts. All outstanding open forward contracts at December 31, 2013 matured in January 2014.

Table of Contents

Item 8. Financial Statements and Supplementary Data  
ENPHASE ENERGY, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AS OF  
DECEMBER 31, 2013 AND 2012, AND FOR THE YEARS ENDED  
DECEMBER 31, 2013, 2012 AND 2011

	Page
Report of Independent Registered Public Accounting Firm	<u>43</u>
Consolidated Balance Sheets	<u>44</u>
Consolidated Statements of Operations	<u>45</u>
Consolidated Statements of Comprehensive Loss	<u>45</u>
Consolidated Statements of Stockholders' Equity	<u>47</u>
Consolidated Statements of Cash Flows	<u>48</u>
Notes to Consolidated Financial Statements	<u>49</u>
<u>Quarterly Financial Information</u>	<u>66</u>

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Enphase Energy, Inc.:

We have audited the accompanying consolidated balance sheets of Enphase Energy, Inc. and subsidiaries (the “Company”) as of December 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2013. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Enphase Energy, Inc. and subsidiaries as of December 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

San Francisco, California  
March 4, 2014

Table of Contents

## ENPHASE ENERGY, INC.

Consolidated Balance Sheets  
(In thousands, except par value)

	December 31,	
	2013	2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$38,190	\$45,294
Accounts receivable, net of allowances of \$2,000 and \$1,177	32,084	27,743
Inventory	16,580	19,843
Prepaid expenses and other	3,655	2,118
Total current assets	90,509	94,998
Property and equipment, net	24,853	25,541
Other assets	1,307	1,752
Total assets	\$116,669	\$122,291
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$7,363	\$11,272
Accrued liabilities	19,722	19,266
Deferred revenues	2,773	933
Current portion of term loans	3,507	2,384
Total current liabilities	33,365	33,855
Long-term liabilities:		
Deferred revenues	11,284	7,537
Warranty obligations	25,490	15,260
Other liabilities	1,154	307
Term loans	5,170	8,677
Total long-term liabilities	43,098	31,781
Total liabilities	76,463	65,636
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.00001 par value, 10,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.00001 par value, 100,000 shares authorized; 42,123 and 40,856 shares issued and outstanding at December 31, 2013 and 2012, respectively	—	—
Additional paid-in capital	192,916	183,629
Accumulated deficit	(152,939	) (127,026 )
Accumulated other comprehensive income	229	52
Total stockholders' equity	40,206	56,655
Total liabilities and stockholders' equity	\$116,669	\$122,291

See Notes to Consolidated Financial Statements

Table of Contents

## ENPHASE ENERGY, INC.

Consolidated Statements of Operations  
(In thousands, except per share data)

	Year Ended December 31,			
	2013	2012	2011	
Net revenues	\$232,846	\$216,678	\$149,523	
Cost of revenues	165,430	161,390	120,454	
Gross profit	67,416	55,288	29,069	
Operating expenses:				
Research and development	34,524	35,601	25,099	
Sales and marketing	31,080	25,973	17,454	
General and administrative	23,970	24,875	15,228	
Total operating expenses	89,574	86,449	57,781	
Loss from operations	(22,158	) (31,161	) (28,712	)
Other income (expense), net:				
Interest expense	(2,055	) (6,436	) (3,006	)
Other income (expense)	(837	) 30	(572	)
Total other expense, net	(2,892	) (6,406	) (3,578	)
Loss before income taxes	(25,050	) (37,567	) (32,290	)
Provision for income taxes	(863	) (651	) —	
Net loss attributable to common stockholders	\$(25,913	) \$(38,218	) \$(32,290	)
Net loss per share attributable to common stockholders, basic and diluted	\$(0.62	) \$(1.24	) \$(25.73	)
Shares used in computing net loss per share attributable to common stockholders, basic and diluted	41,647	30,740	1,255	
See Notes to Consolidated Financial Statements				

Table of Contents

ENPHASE ENERGY, INC.

Consolidated Statements of Comprehensive Loss  
(In thousands)

	Year Ended December 31,		
	2013	2012	2011
Net loss attributable to common stockholders	\$(25,913	) \$(38,218	) \$(32,290
Other comprehensive income (loss):			
Foreign currency translation adjustments	177	(31	) 83
Other comprehensive income (loss):	177	(31	) 83
Comprehensive loss attributable to common stockholders	\$(25,736	) \$(38,249	) \$(32,207

See Notes to Consolidated Financial Statements



Table of Contents

## ENPHASE ENERGY, INC.

## Consolidated Statements of Stockholders' Equity

(In thousands, except per share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
BALANCE—December 31, 2010	22,221	\$93,596	843	\$—	\$1,403	\$(56,518)	\$—	\$38,481
Private placement of common stock at \$5.27 per share			353	—	1,858			1,858
Exercise of stock options			502	—	190			190
Stock-based compensation					2,120			2,120
Fair value of warrants and common stock issued in connection with convertible notes					2,312			2,312
Fair value of beneficial conversion feature upon issuance of convertible notes					1,165			1,165
Fair value of beneficial conversion feature from accrued paid-in-kind interest of convertible notes					55			55
Net loss						(32,290)		(32,290)
Foreign currency translation adjustment							83	83
BALANCE—December 31, 2011	22,221	93,596	1,698	—	9,103	(88,808)	83	13,974
Issuance of common stock under employee stock plans			138	—	255			255
Stock-based compensation					4,766			4,766
Common stock issued upon initial public offering (“IPO”), net of offering costs			10,315	—	53,826			53,826
Conversion of convertible preferred stock into common stock upon IPO	(22,221)	(93,596)	25,171	—	93,596			—
Conversion of convertible notes and paid-in-kind interest into common stock upon IPO			3,534	—	21,204			21,204
Reclassification of preferred stock warrant liability to APIC upon IPO					879			879
Net loss						(38,218)		(38,218)
Foreign currency translation adjustment							(31)	(31)
	—	—	40,856	—	183,629	(127,026)	52	56,655

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BALANCE—December 31, 2012							
Issuance of common stock under employee stock plans	1,255	—	2,438				2,438
Stock-based compensation			6,849				6,849
Issuance of common stock upon exercise of warrants	12	—	—				—
Net loss				(25,913	)		(25,913 )
Foreign currency translation adjustment					177		177
BALANCE—December 31, 2013	—	\$—	42,123	\$—	\$192,916	\$ (152,939 )	\$ 229
							\$ 40,206

See Notes to Consolidated Financial Statements

Table of Contents

## ENPHASE ENERGY, INC.

## Consolidated Statements of Cash Flows

(In thousands)

	Year Ended December 31,		
	2013	2012	2011
Cash flows from operating activities:			
Net loss	\$(25,913 )	\$(38,218 )	\$(32,290 )
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	6,981	5,568	3,032
Provision for doubtful accounts	678	1,068	127
Net loss on disposal of assets	82	120	0
Non-cash interest expense	429	4,777	1,835
Stock-based compensation	6,849	4,766	2,120
Change in fair value of convertible preferred stock warrants	—	(520 )	321
Changes in operating assets and liabilities:			
Accounts receivable	(5,019 )	(11,040 )	(9,874 )
Inventory	3,263	(8,615 )	(6,708 )
Prepaid expenses and other assets	(1,450 )	(711 )	(1,648 )
Accounts payable, accrued liabilities and warranty obligations	7,641	16,774	17,275
Deferred revenues	5,587	(18,614 )	25,443
Net cash used in operating activities	(872 )	(44,645 )	(367 )
Cash flows from investing activities:			
Purchases of property and equipment	(6,257 )	(12,990 )	(14,662 )
Net cash used in investing activities	(6,257 )	(12,990 )	(14,662 )
Cash flows from financing activities:			
Proceeds from issuance of convertible notes	—	—	20,000
Costs related to issuance of convertible notes	—	—	(274 )
Proceeds from private placement of common stock	—	—	1,858
Principal payments under capital leases	(40 )	(96 )	(169 )
Proceeds from borrowings under term loans	—	10,000	9,898
Payments of financing costs	—	(1,031 )	(573 )
Repayments of term loans	(2,447 )	(14,103 )	(1,863 )
Proceeds from issuance of common stock under employee stock plans	2,429	255	190
Proceeds from issuance of common stock in IPO, net of underwriting discounts and commissions	—	58,609	—
Payment of offering costs	—	(2,198 )	(2,585 )
Net cash (used in) provided by financing activities	(58 )	51,436	26,482
Effect of exchange rate changes on cash	83	(31 )	78
Net (decrease) increase in cash and cash equivalents	(7,104 )	(6,230 )	11,531
Cash and cash equivalents — Beginning of period	45,294	51,524	39,993
Cash and cash equivalents — End of period	\$38,190	\$45,294	\$51,524
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$1,391	\$1,681	\$1,235
Cash paid for income taxes	\$899	\$—	\$—
Non-cash financing and investing activities:			
Assets acquired under capital lease	\$—	\$—	\$295
Purchases of property and equipment included in accounts payable	\$837	\$772	\$903
Offering costs not yet paid	\$—	\$—	\$371
Conversion of convertible notes into common stock upon IPO	\$—	\$21,204	\$—

Reclassification of convertible preferred stock warrant liability to additional paid-in capital upon IPO	\$—	\$879	\$—
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See Notes to Consolidated Financial Statements

Table of Contents

ENPHASE ENERGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010

1. DESCRIPTION OF BUSINESS

Enphase Energy, Inc. and subsidiaries (the “Company”) designs, develops, and sells microinverter systems for the solar photovoltaic industry. The Company was incorporated in 2006 and began selling its products in 2008. The Company’s microinverter system consists of (i) an Enphase microinverter and related accessories that convert direct current (“DC”) power to grid-compliant alternating current (“AC”) power; (ii) an Envoy communications gateway device that collects and transmits performance information from each solar module to the Company’s hosted data center; and (iii) the Enlighten web-based software platform that collects and processes this information to enable customers to monitor and manage their solar power systems. The Company sells microinverter systems primarily to distributors who resell them to solar installers. The Company also sells directly to large installers as well as through original equipment manufacturers (“OEMs”) and strategic partners.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the Company’s consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. These estimates are based on information available as of the date of the financial statements; therefore, actual results could differ materially from management’s estimates using different assumptions or under different conditions.

Risks and Uncertainties

The Company is subject to risks inherent in a business with a limited operating history, including, but not limited to, new and rapidly evolving markets, advances and trends in the development of new technology and services, unfavorable economic and market conditions, competition from larger and more established companies, limited management resources and dependence on a limited number of contract manufacturers and suppliers. The inability to anticipate or to respond adequately to technological developments in the Company's industry, changes in customer or supplier requirements, or changes in regulatory requirements or industry standards could have a material adverse effect on the Company's business and operating results.

Revenue Recognition

The Company generates revenue from sales of its microinverter systems, which include microinverter units and related accessories, an Envoy communications gateway device, and an Enlighten web-based monitoring service, to distributors, large installers, OEMs and strategic partners. Enlighten service revenue represented less than 1% of the total revenues for all periods presented.

Revenues from sales of microinverters and related accessories, and communication gateways are recognized when: (i) persuasive evidence of an arrangement exists; (ii) delivery of the products has occurred in accordance with the terms of the sales agreement and title of and risk of loss have passed to the customer; (iii) the sale price is fixed or determinable; and (iv) collection is reasonably assured. Provisions for rebates, sales incentives, and discounts to customers are accounted for as reductions in revenue in the same period the related sales are recorded.

Sales of an Envoy communications gateway device include the Enlighten web-based monitoring service. The allocation of revenue between the two deliverables is based on the Company's best estimate of selling price determined by considering multiple factors including, internal costs, gross margin and historical pricing practices. After allocating the overall consideration from such sale to each deliverable using a best estimate of the selling price, (i) revenue from the sale of Envoy

Table of Contents

devices is recognized upon shipment, assuming all other revenue recognition criteria have been met and (ii) revenue from the web-based monitoring service is recognized ratably over the estimated economic life of the related Envoy devices of 10 years.

Deferred revenues consist of payments received from customers in advance of revenue recognition for the Company's products and services described above. As of December 31, 2013 and 2012, deferred revenues consist entirely of service revenue.

## Cost of Revenues

The Company includes the following in cost of revenues: product costs, warranty, manufacturing personnel and logistics costs, inventory write-downs, hosting services costs related to the Company's Enlighten service offering, and depreciation and amortization of manufacturing test equipment.

## Cash and Cash Equivalents

The Company considers all highly liquid investments, such as certificates of deposit and money market instruments with maturities of three months or less at the time of acquisition to be cash equivalents. For all periods presented, its cash balances consist of amounts held in non-interest-bearing deposits and money market accounts.

## Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to their relatively short-term nature. The carrying values of the Company's variable rate term loans approximate fair value.

## Derivative Instruments

The Company operates and conducts business in foreign countries where its foreign entities use the local currency as their respective functional currency. As a result, the Company is exposed to movements in foreign currency exchange rates. The Company utilizes foreign currency forward contracts to reduce the impact of foreign currency fluctuations related to anticipated cash receipts from expected future revenues denominated in Euros and intercompany transaction gains or losses. The foreign currency forward contracts are accounted for as derivatives whereby the fair value of the contracts is reported as other current assets or current liabilities in the accompanying consolidated balance sheets, and gains and losses resulting from changes in the fair value are reported in other income (expense), net, in the accompanying consolidated statements of operations.

## Allowances for Doubtful Accounts

The Company maintains allowances for doubtful accounts for uncollectible accounts receivable. Management estimates anticipated losses from doubtful accounts based on days past due, collection history and the financial health of customers. The allowance for doubtful accounts was \$2.0 million and \$1.2 million at December 31, 2013 and 2012, respectively. The following table sets forth activities in the allowance for doubtful accounts for the periods indicated:

	December 31,		
	2013	2012	2011
Balance, at beginning of year	\$1,177	\$144	\$17
Charged to expenses	678	1,068	127
Charged to Other Accounts	145	(35	) —
Balance, at end of year	\$2,000	\$1,177	\$144

## Inventory

Inventory is valued at the lower of cost or market. The Company determines cost on a first-in first-out basis. Certain factors could affect the realizable value of its inventory, including customer demand and market conditions. Management assesses the valuation on a quarterly basis and writes down the value for any excess and obsolete inventory based upon expected demand, anticipated sales price, effect of new product introductions, product obsolescence, customer concentrations, product merchantability and other factors. Inventory write-downs are equal to the difference between the cost of inventories and their estimated net realizable market value.

50

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## Table of Contents

### Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Cost includes the price paid to acquire or construct the asset as well as any expenditure that substantially adds to the value of or significantly extends the useful life of an existing asset. Repair and maintenance costs are expensed as incurred. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, which range from three to ten years. Leasehold improvements are amortized over the shorter of the lease term or expected useful life of the improvements.

### Capitalized Software Costs

Internally used software, whether purchased or developed, is capitalized and amortized on a straight-line basis over their estimated useful lives. Costs associated with internally developed software are expensed until the point at which the project has reached the development stage. Subsequent additions, modifications or upgrades to internal-use software are capitalized only to the extent that they provide additional functionality. Software maintenance and training costs are expensed in the period in which they are incurred. The capitalization of software requires judgment in determining when a project has reached the development stage and the period over which the Company expects to benefit from the use of that software.

### Long-Lived Assets

Management evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets.

### Warranty Obligations

#### Microinverters Sold Through December 31, 2013

The Company's warranty accrual provides for the replacement of microinverter units that fail during the product's warranty term (15 years for first and second generation microinverters and up to 25 years for third and fourth generation microinverters). On a quarterly basis, the Company employs a consistent, systematic and rational methodology to assess the adequacy of its warranty liability. This assessment includes updating all key estimates and assumptions for each generation of product, based on historical results, trends and the most current data available as of the filing date. The key estimates and assumptions used in the warranty liability are thoroughly reviewed by management on a quarterly basis. The key estimates used by the Company to estimate its warranty liability are: (1) the number of units expected to fail over time (i.e. failure rate); (2) the number of failed units expected to result in warranty claims over time (i.e. claim rate); and (3) the per unit cost of replacement units, including outbound shipping and limited labor costs, expected to be incurred to replace failed units over time (i.e. replacement cost).

**Estimated Failure Rates**—The Company's Quality and Reliability department has primary responsibility to determine the estimated failure rates for each generation of microinverter. To establish initial failure rate estimates for each generation of microinverter, the Company's quality engineers use a combination of industry standard MTBF (Mean Time Between Failure) estimates for individual components contained in its microinverters, third party data collected on similar equipment deployed in outdoor environments similar to those in which the Company's microinverters are installed, and rigorous long term reliability and accelerated life cycle testing which simulates the service life of the microinverter in a short period of time. As units are deployed into production environments, the Company continues

to monitor product performance via its Enlighten monitoring platform. It typically takes three to nine months between the date of sale and date of end-user installation. Consequently, the Company's ability to monitor actual failures of units sold similarly lags by three to nine months. When a microinverter fails and is returned, the Company performs diagnostic root cause failure analysis to understand and isolate the underlying mechanism(s) causing the failure. The Company then uses the results of this analysis (combined with the actual, cumulative performance data collected on those units prior to failure via Enlighten) to draw conclusions with respect to how or if the identified failure mechanism(s) will impact the remaining units deployed in the installed base.

**Estimated Claim Rates**—Warranty claim rate estimates are based upon assumptions with respect to expected customer behavior over the warranty period. As the vast majority of the Company's microinverters have been sold to end users for residential applications, the Company believes that warranty claim rates will be affected by changes over time in residential

## Table of Contents

home ownership because the Company expects that subsequent homeowners are less likely to file claims than the homeowners who originally purchase the microinverters.

**Estimated Replacement Costs**—Three factors are considered in the Company's analysis of estimated replacement cost: (1) the estimated cost of replacement microinverters; (2) the estimated cost to ship replacement microinverters to end users; and (3) the estimated labor reimbursement expected to be paid to third party installers performing replacement services for the end user. Because the Company's warranty provides for the replacement of defective microinverters over long periods of time (either 15 or 25 years, depending on the generation of product purchased), the estimated per unit cost of current and future product generations is considered in the estimated replacement cost. Estimated costs to ship replacement units are based on observable, market-based shipping costs paid by the Company to third party freight carriers. The Company has a separate program that allows third-party installers to claim fixed-dollar reimbursements for labor costs they incur to replace failed microinverter units for a limited time from the date of original installation. Included in the Company's estimated replacement cost is an analysis of the number of fixed-dollar labor reimbursements expected to be claimed by third party installers over the limited offering period.

If actual failure rates, claim rates, or replacement costs differ from the Company's estimates in future periods, changes to these estimates would be required, resulting in increases or decreases in the Company's warranty obligations. Such increases or decreases could be material.

### Fair Value Option for Microinverters Sold Since January 1, 2014

The Company's warranty obligations related to microinverters sold since January 1, 2014 provide the Company the right, but not the requirement, to assign its warranty obligations to a third-party. Pursuant to Accounting Standards Codification ("ASC") 820, Fair Value Measurement, such warranties are eligible to be accounted for at fair value. The Company expects to elect the fair value option to measure all eligible microinverter warranties for microinverters sold subsequent to January 1, 2014.

In addition to the key estimates of failure rates, claim rates and replacement costs described above, the fair value of warranty obligations will require the use of certain Level 3 inputs which are unobservable and significant to the overall fair value measurement. Such additional assumptions will include a discount rate based upon the Company's credit-adjusted risk-free rate and a hypothetical profit margin and risk premium required of a hypothetical market participant to assume the obligation. Warranty obligations initially recorded at fair value (computed using an expected present value technique) at the time of sale will be subsequently re-measured to fair value at each reporting date. In addition, the fair value of the liability will be accreted over the corresponding term of the warranty of up to 25 years using the effective interest method. Any changes in fair value of the liability from period-to-period, including accretion expense, will be recognized in cost of revenues.

If actual failure rates, claim rates, replacement costs, discount rate or the other additional assumptions differ from the Company's estimates in future periods, changes to these estimates would be required, resulting in increases or decreases in the Company's warranty obligations. Such increases or decreases could be material.

As of December 31, 2013, warranty obligations were \$30.4 million. Periodic adjustments necessitated by actual experience of claims and any future changes in estimates to this liability associated with sales prior to December 31, 2013 will continue to be accounted for on an undiscounted basis.

### Research and Development Costs

The Company expenses research and development costs as incurred. Research and development costs totaled \$34.5 million, \$35.6 million and \$25.1 million in 2013, 2012 and 2011, respectively.

### Stock-Based Compensation

Share-based payments are required to be recognized in the Company's consolidated statements of operations based on their fair values and the estimated number of shares expected to vest. The Company measures stock-based compensation expense for all share-based payment awards, including stock options made to employees and directors, based on the estimated fair values on the date of the grant. The fair value of stock options granted is estimated using the Black-Scholes option valuation model. The fair value of restricted stock units granted is determined based on the price of the Company's common stock on the date of grant. Stock-based compensation, net of estimated forfeitures, is recognized on a straight-line basis over the requisite service period, which is typically four years.

Table of Contents

## Comprehensive Loss

Comprehensive loss consists of two components, net loss and other comprehensive income (loss). Other comprehensive income (loss) refers to gains and losses that are recorded as an element of stockholders' equity but are excluded from net income. The Company's other comprehensive income (loss) consists of foreign currency translation adjustments for all periods presented.

## Income Taxes

The Company records income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected tax consequences of temporary differences between the tax bases of assets and liabilities for financial reporting purposes and amounts recognized for income tax purposes. In estimating future tax consequences, generally all expected future events other than enactments or changes in the tax law or rates are considered. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company operates in various tax jurisdictions and is subject to audit by various tax authorities. The Company follows accounting for uncertainty in income taxes which requires that the tax effects of a position be recognized only if it is "more likely than not" to be sustained based solely on its technical merits as of the reporting date. The Company considers many factors when evaluating and estimating its tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes.

## 3. INVENTORY

Inventory as of December 31, 2013 and 2012, consists of the following (in thousands):

	December 31,	
	2013	2012
Raw materials	\$1,428	\$2,223
Finished goods	15,152	17,620
Total inventory	\$16,580	\$19,843

In 2013, no significant write-downs of inventories were made. In 2012 and 2011, the Company recorded write-downs of inventories of \$0.8 million and \$2.7 million, respectively.

## 4. PROPERTY AND EQUIPMENT, NET

As of December 31, 2013 and 2012, property and equipment, net consists of the following (in thousands):

	Estimated Useful Life (Years)	December 31,	
		2013	2012
Equipment and machinery	5	\$21,853	\$18,723
Furniture and fixtures	5-7	2,837	2,788
Computer equipment	3	1,842	1,688
Capitalized software	3-5	7,343	5,760
Leasehold improvements	3-10	5,881	5,642
Construction in progress		1,703	1,419
Total		41,459	36,020

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Less accumulated depreciation and amortization	(16,606	) (10,479	)
Property and equipment, net	\$24,853	\$25,541	

Depreciation expense was \$5.5 million, \$4.4 million and \$2.3 million for 2013, 2012 and 2011, respectively.

53

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Table of Contents

Capitalized Developed or Purchased Internal-Use Software—Capitalized software costs are being amortized ratably over the estimated useful lives and are included within amortization expense in the amount of \$1.5 million, \$1.2 million and \$0.7 million for 2013, 2012 and 2011, respectively.

The following table summarizes capitalized internal-use software costs (in thousands):

	December 31, 2013		December 31, 2012	
	Gross Cost	Net of Accumulated Amortization	Gross Cost	Net of Accumulated Amortization
Developed internal-use software	\$3,322	\$1,333	\$2,570	\$1,053
Purchased software for internal use	4,021	2,311	3,190	2,227
Total software	\$7,343	\$3,644	\$5,760	\$3,280

The estimated future aggregate amortization expense for existing internal-use software as of December 31, 2013 is expected to be \$1.7 million in 2014, \$1.2 million in 2015 and \$0.7 million in 2016.

## 5. WARRANTY OBLIGATIONS

The Company's warranty activities during 2013, 2012 and 2011 were as follows (in thousands):

	December 31,		
	2013	2012	2011
Balance, at beginning of year	\$21,338	8,738	\$2,668
Accruals for warranties issued during the year	6,303	8,218	5,279
Changes in estimates	10,303	7,607	1,751
Settlements	(7,512)	) (3,225)	) (960)
Balance, at end of year	30,432	21,338	8,738
Less current portion included in accrued liabilities	(4,942)	) (6,078)	) (2,005)
Long-term portion	\$25,490	\$15,260	\$6,733

The Company sold approximately 1.0 million second generation microinverters from 2009 through mid-2012. The Company has sold approximately 3.5 million third generation microinverters since mid-2012 and continues to sell such third generation microinverters. The Company has sold 150,000 fourth generation microinverters since mid-2013.

### Changes in Estimates

On a quarterly basis, the Company uses the best and most complete underlying information available, following a consistent, systematic and rational methodology to determine its warranty obligations. The Company considers all available evidence to assess the reasonableness of all key assumptions underlying its estimated warranty obligations for each generation of microinverter. The changes in estimates discussed below arose from new information available to management and subsequent developments, and accordingly, from better insight and improved judgment. Changes in estimates included in the table above were comprised of the following:

#### 2013

In 2013, primarily in the second, third and fourth quarters, the Company experienced actual failures of its second generation microinverters that exceeded its then current failure rate estimate. Based on continuing analysis of field performance data and diagnostic root-cause failure analysis performed on returned units, the Company concluded that

it was necessary to increase the estimated failure rates for its second generation product and recorded additional warranty expense of \$19.5 million in 2013 (including \$3.5 million in the three months ended December 31, 2013). During the third quarter of 2013, the Company recorded a reduction to warranty expense of \$3.1 million related to a decrease in the expected failure rate of the Company's third generation product. The Company concluded that there was sufficient historical data of actual field performance of previously sold third generation products to support a lower estimated failure rate.



## Table of Contents

In addition, the Company updated its estimated claim rates for its second and third generation products resulting in a decrease to warranty expense of \$4.2 million. The revision to estimated claim rates was based on the Company's observed historical end user behavior and assumptions with respect to expected customer behavior over the 15 or 25 year warranty term.

Also, the Company decreased warranty expense by \$1.9 million (including \$1.7 million in the three months ended December 31, 2013), primarily to reflect estimated lower costs to produce fourth generation microinverters to fulfill warranty obligations for second and third generation microinverters.

### 2012

In 2012, primarily in the third and fourth quarters, the Company experienced actual failures of its second generation microinverters that exceeded its then current failure rate estimate. Based on continuing analysis of field performance data and diagnostic root-cause failure analysis performed on returned units, the Company concluded that it was necessary to increase the estimated failure rates for its second generation product and recorded additional warranty expense of \$10.2 million in 2012 (including \$2.4 million in the three months ended December 31, 2012).

In the fourth quarter of 2012, the Company revised its claim rate estimate to reflect a decrease in the percentage of end users who are able to access their system's performance data using the Enlighten monitoring service. Approximately 80 to 90 percent of end users have purchased systems that include Enlighten. End users who have not purchased Enlighten do not have access to the same inverter-level performance data as end users using Enlighten and, consequently are less likely to make warranty claims. In 2012, based on observation of historical results, the Company confirmed that non-Enlighten end users had a lower claim rate than originally estimated. As a result, warranty expense decreased by \$0.5 million to reflect this information.

In addition, the Company recorded a reduction to warranty expense of \$2.1 million related to replacement costs, primarily comprised of a \$1.9 million reduction in shipping costs. Beginning in the third quarter of 2012, the Company revised its business practice to utilize non-expedited shipping terms for future replacement units, resulting in the reduction in estimated future replacement costs.

### 2011

In 2011, warranty expense included \$1.8 million resulting from changes in estimates to reflect increased estimated replacement costs for second generation products.

## 6. FAIR VALUE OF FINANCIAL INSTRUMENTS

The accounting guidance defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance. The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. An asset's or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value:

Level 1—Valuations based on quoted prices in active markets for identical assets or liabilities that the Company is able to access. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of such assets or liabilities do not entail a significant degree of judgment.

Level 2—Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3—Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

Derivative Instruments—The Company utilizes foreign currency forward contracts to reduce the impact of foreign currency fluctuations arising from both sales and purchases denominated in Euros and the British Pound Sterling. As of

55

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Table of Contents

December 31, 2013 and 2012, the aggregate gross notional amounts of outstanding foreign currency forward contracts were \$12.5 million and \$6.1 million, respectively. All outstanding open forward contracts at December 31, 2013 matured in January 2014.

The following table presents the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy at December 31, 2013 and 2012 (in thousands):

	Asset Derivatives		Liability Derivatives	
	December 31, 2013	December 31, 2012	December 31, 2013	December 31, 2012
Foreign currency forward contracts (Level 2)	\$325	\$—	\$605	\$268

In 2013 and 2012, the Company recognized net losses of \$0.4 million and \$0.5 million related to foreign currency forward contracts, respectively.

## 7. LONG-TERM DEBT

The Company's long-term debt was comprised of the following at December 31, 2013 and 2012 (in thousands):

	December 31,	
	2013	2012
Term loans	\$7,400	\$7,400
Equipment financing facility, net of unamortized discount of \$31 and \$94, respectively	1,277	3,661
Total debt	8,677	11,061
Less current portion	(3,507)	(2,384)
Long-term portion	\$5,170	\$8,677

As of December 31, 2013, the amount of future principal repayments due on the total debt is as follows (in thousands):

2014	\$3,538
2015	2,973
2016	2,197
Total	\$8,708

**Revolving Credit Facility**—The Company has a \$50.0 million revolving credit facility (the “Revolver”) with Wells Fargo Bank, N.A. (“Wells Fargo”), which had a maturity date of November 7, 2015. On February 14, 2014, the Company entered into an amendment which granted an automatic extension of the maturity date from November 7, 2015 to November 7, 2016, provided the Company has not borrowed any amounts under the Additional Term Loans made available by Hercules Technology Growth Capital, Inc. (“Hercules”) as described below, or otherwise restructure the Additional Term Loans to the satisfaction of Wells Fargo. The amount of loans available to be drawn under the Revolver is subject to a borrowing base calculation that limits availability to a percentage of eligible domestic accounts receivable plus a percentage of the value of eligible domestic inventory, less certain reserves. Wells Fargo and Hercules are parties to an intercreditor agreement, pursuant to which Hercules has a first lien on certain of the Company's assets and a second priority on its other assets. Subject to the intercreditor agreement, loans under the Revolver are secured by a pledge of substantially all of the Company's assets other than intellectual property. Loans under the Revolver bear interest in cash at an annual rate equal to, at the Company's option, either LIBOR or a “base rate” that is comprised of, among other things, the prime rate, plus a margin that is between 1.5% and 4.25% depending on the currency borrowed and the specific term of repayment. The Revolver contains customary affirmative and negative covenants and events of default, and requires the Company to maintain at least \$15.0 million of liquidity at all times, of which at least \$8.0 million (\$5.0 million in the case the maturity date is November 7, 2016) must be

undrawn availability. To date, the Company has not drawn on the Revolver and approximately \$22.4 million was available for borrowing as of December 31, 2013 based on eligible accounts receivable and inventory balances pursuant to the agreement.

Table of Contents

**Term Loans**—The Company has a loan and security agreement with Hercules, pursuant to which it borrowed \$7.4 million (the "Initial Term Loan"). In addition, the Company may borrow an additional \$15.6 million in term loans (the "Additional Term Loans"), which must be drawn, if at all, not later than March 31, 2014. To date, the Company has not, and does not intend to borrow any Additional Term Loans prior to its impending expiration on March 31, 2014. The Company used the proceeds of the Initial Term Loan to replenish cash on hand, which had previously been used to repay the approximately \$7.5 million in other outstanding term loans. Loans under the Hercules facility bear interest at an annual rate equal to the higher of (i) the prime rate plus 8.25% or (b) 11.5%. All loans under the Hercules facility will mature on August 1, 2016. Interest is payable in cash on a monthly basis, and the loans will amortize in equal monthly installments commencing on March 1, 2014 for the Initial Term Loan. In addition, the facility includes a \$0.6 million end of term charge due on August 1, 2016. Prepayments of loans under the facility are subject to early payment penalties. Loans under the Hercules facility are secured by a pledge of substantially all of the Company's assets other than intellectual property. The Hercules facility does not include any financial covenants. As of December 31, 2013, the outstanding principal balance under the Term Loans was \$7.4 million, which solely relates to borrowings under the Initial Term Loan.

**Equipment Financing Facility**—The Company has an equipment financing facility with Hercules. The equipment financing facility has a variable interest rate set at the higher of 5.75% above the prime lending rate and 9.0% annually and expires July 1, 2014. This facility is secured by the financed equipment and restricts the Company's ability to pay dividends and take on certain types of additional liens. As of December 31, 2013, the outstanding principal balance under the equipment financing facility was \$1.3 million.

## 8. COMMITMENTS AND CONTINGENCIES

**Operating Leases**—The Company leases office facilities under noncancelable operating leases that expire on various dates through 2022. The terms of the lease agreements generally provide for rental payments on a graduated basis, and certain leases require the Company to pay its portion of executory costs such as taxes, insurance, and operating expenses. The Company recognizes rent expense on a straight-line basis over the lease term.

Rent expense for 2013, 2012 and 2011 was \$2.6 million, \$2.4 million and \$1.2 million, respectively.

The Company's minimum lease payments under noncancelable operating leases, exclusive of executory costs, as of December 31, 2013 are as follows (in thousands):

2014	\$1,672
2015	1,749
2016	1,766
2017	1,555
2018	1,599
Thereafter	5,756
Total minimum lease payments	\$14,097

**Purchase Obligations**—The Company has contractual obligations to purchase goods and services, which specify fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. Purchase obligations do not include contracts that may be canceled without penalty.

The Company utilizes third parties to manufacture its products. As of December 31, 2013, the Company had purchase obligations with third party manufacturers and suppliers totaling approximately \$87.6 million. Certain agreements specify future quantities and pricing of products to be supplied by the Company's contract manufacturers for periods up to seven years. Of the \$87.6 million included in purchase obligations, \$72.5 million are cancelable; however if canceled, the agreement requires the Company to pay cancellation penalties of up to \$5.6 million.

Contingencies —From time to time, the Company may be involved in litigation relating to claims arising out of its operations. The Company is not currently involved in any material legal proceedings. The Company may, however, be involved in material legal proceedings in the future. Such matters are subject to uncertainty and there can be no assurance that such legal proceedings will not have a material adverse effect on its business, results of operations, financial position or cash flows.

Table of Contents

9. STOCKHOLDERS' EQUITY

Initial Public Offering

On April 4, 2012, the Company completed its initial public offering ("IPO"), issuing 10,315,151 shares of common stock at an offering price of \$6.00 per share. The net proceeds from the sale of the shares were \$53.8 million, after deducting the underwriters' discounts and commissions of \$3.3 million and other offering costs of \$4.8 million. Upon consummation of the IPO, the Company's 22,220,856 outstanding shares of convertible preferred stock (\$93.6 million carrying value) were automatically converted into 25,171,017 shares of common stock, and the \$21.2 million outstanding balance of principal and accrued paid-in-kind interest in convertible notes were automatically converted into 3,533,988 shares of common stock at a conversion price equal to the IPO price of \$6.00 per share. As a result, the Company recorded a charge of \$2.8 million to interest expense in 2012 for the extinguishment of debt related to the unamortized debt issuance costs and debt discounts.

Common Stock Warrants

Prior to its IPO, the Company issued convertible preferred stock warrants in connection with several financing transactions. These warrants automatically converted into warrants to purchase common stock upon the consummation of the IPO.

As of December 31, 2013, warrants to purchase 293,474 shares of the Company's common stock remained outstanding with exercise prices ranging from \$5.27 to \$6.17. Such warrants are exercisable and will expire on various dates from 2016 through 2021.

10. STOCK-BASED COMPENSATION

Description of Equity Incentive Plans

2006 Plan—Under the Company's 2006 Equity Incentive Plan (the "2006 Plan"), equity awards granted generally vest over a four-year period from the date of grant with a contractual term of up to 10 years. As of December 31, 2013, there were 5.2 million shares of common stock outstanding under the 2006 Plan. No further stock options or other stock awards may be granted under the 2006 Plan.

2011 Plan—Under the 2011 Equity Incentive Plan (the "2011 Plan"), the Company may, initially, issue up to 2,643,171 shares of its common stock pursuant to stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, or collectively, stock awards, all of which may be granted to employees, including officers, and to non-employee directors and consultants. Options granted under the 2011 Plan before August 1, 2012 generally expire 10 years after the grant date and options granted thereafter generally expire 7 years after the grant date. Equity awards granted under the 2011 Plan generally vest over a four-year period from the date of grant based on continued employment. The number of shares of the Company's common stock authorized for issuance under the 2011 Plan will automatically increase, on each January 1, by 4.5% of the total number of shares of the Company's common stock outstanding on December 31 of the preceding calendar year, or such lesser number of shares of common stock as determined by the board of directors. As of December 31, 2013, 586,524 shares of common stock remained available for issuance pursuant to future grants under the 2011 Plan. On January 1, 2014, the shares authorized for issuance under the 2011 Plan automatically increased by 1,895,541 shares.

2011 Employee Stock Purchase Plan—The 2011 Employee Stock Purchase Plan ("ESPP") became effective immediately upon the execution and delivery of the underwriting agreement for the Company's IPO on March 29, 2012. The ESPP initially authorizes the issuance of 669,603 shares of the Company's common stock pursuant to purchase rights granted to employees. The number of shares of common stock reserved for issuance will automatically increase, on each January 1, by 330,396 shares of the Company's common stock or a lesser number of shares of common stock as

determined by the Company's board of directors.

The ESPP is implemented by concurrent offering periods and each offering period may contain up to four interim purchase periods. In general, offering periods consists of the 24 months periods commencing on each May 1 and November 1 of a calendar year.

Generally, all full time employees, including executive officers, are eligible to participate in the ESPP. The ESPP permits eligible employees to purchase the Company's common stock through payroll deductions, which may not exceed 15% of the employee's total compensation subject to certain limits. Stock may be purchased under the plan at a price equal to



Table of Contents

85% of the fair market value of the Company's stock on either the date of purchase or the first day of an offering period, whichever is lower. A two year look-back feature in the Company's ESPP causes an offering period to reset if the fair value of the Company's common stock on a purchase date is less than that on the initial offering date for that offering period. The reset feature, when triggered, will be accounted for as a modification to the original offering, resulting in additional expense to be recognized over the 24-month period of the new offering. During any calendar year, participants may not purchase shares of common stock having a value greater than \$25,000, based on the fair market value per share of the common stock at the beginning of an offering period.

As of December 31, 2013, there were 613,984 shares of the Company's common stock available for issuance under the ESPP. On January 1, 2014, the shares authorized for issuance under the ESPP automatically increased by 330,396 shares.

Valuation of Equity Awards

Stock Options

The fair value of each option granted was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

Expected term—The expected term of the option awards represents the period of time between the grant date of the option awards and the date the option awards are either exercised, converted or canceled, including an estimate for those option awards still outstanding.

Expected volatility—The Company uses the simplified method, as permitted by the SEC for companies with a limited history of stock option exercise activity, to determine the expected term for its option grants. Expected stock price volatility is determined based on an average of the historical volatilities of the common stock of several companies with characteristics similar to those of the Company.

Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant and with a maturity that approximates the Company's expected term.

Dividend yield—The dividend yield is based on the Company's dividend history and the anticipated dividend payout over its expected term.

Table of Contents

The assumptions used in calculating fair values for stock options granted under the Plan and the resultant weighted-average estimated fair values for the periods presented are as follows:

	Year Ended December 31,			
	2013	2012	2011	
Expected term (in years)	4.4	5.7	6.0	
Expected volatility	68.4	% 74.5	% 72.0	%
Annual risk-free rate of return	1.0	% 0.9	% 1.8	%
Dividend yield	—	% —	% —	%
Weighted-average fair value on grant date	\$3.84	\$4.69	\$5.08	

**Restricted Stock Units**

The fair value of restricted stock units granted is determined based on the price of the Company's common stock on the date of grant.

**Stock-Based Compensation Expense**

The following table summarizes the components of total stock-based compensation expense included in the consolidated statement of operations for the periods presented (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Cost of revenues	\$438	\$196	\$39
Research and development	2,110	1,728	795
Sales and marketing	1,812	1,254	671
General and administrative	2,489	1,588	615
Total stock-based compensation expense	\$6,849	\$4,766	\$2,120

The following table summarizes stock-based compensation associated with each type of award:

	Year Ended December 31,		
	2013	2012	2011
Stock options and restricted stock units	\$6,314	\$4,519	\$2,120
ESPP	535	247	—
Total stock-based compensation expense	\$6,849	4,766	\$2,120

As of December 31, 2013, there was approximately \$13.2 million of total unrecognized compensation cost related to unvested equity awards, net of expected forfeitures, which is expected to be recognized over a weighted-average period of 2.6 years.

No income tax benefit has been recognized relating to stock-based compensation expense and no tax benefits have been realized from exercised stock options.

Table of Contents

## Equity Awards Activity

## Stock Options

A summary of the Company's stock option activity for 2013, 2012 and 2011 is as follows (in thousands, except per share data):

	Shares	Weighted-Average Exercise Price per Share
Options outstanding — December 31, 2010	5,802	\$0.90
Granted	1,110	6.16
Exercised	(502)	) 0.38
Canceled	(154)	) 2.82
Options outstanding — December 31, 2011	6,256	1.83
Granted	2,478	7.35
Exercised	(59)	) 1.26
Canceled	(506)	) 5.55
Options outstanding — December 31, 2012	8,169	3.28
Granted	1,506	7.17
Exercised	(822)	) 1.69
Canceled	(344)	) 7.74
Options outstanding — December 31, 2013	8,509	3.94

The following table summarizes information about stock options outstanding at December 31, 2013:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number of Shares (in thousands)	Weighted-Average Remaining Life (in years)	Weighted-Average Exercise Price	Number of Shares (in thousands)	Weighted-Average Exercise Price
\$0.27 — \$0.91	2,424	5.5	\$0.29	2,424	\$0.29
\$1.63 — \$1.63	1,663	6.5	1.63	1,486	1.63
\$2.00 — \$5.78	1,209	6.3	3.87	617	3.32
\$5.87 — \$7.50	1,379	7.4	6.91	428	7.00
\$7.68 — \$8.82	1,280	7.3	8.09	309	8.26
\$9.40 — \$11.00	554	7.7	10.04	287	9.98
Total	8,509	6.6	3.94	5,551	2.45

The intrinsic value of options exercised during 2013 and 2012 was \$3.2 million and \$0.3 million, respectively. As of December 31, 2013, there were 8.3 million options outstanding that were vested and expected to vest. Such options have a weighted-average exercise price of \$3.87 and a weighted-average remaining contractual term of 6.5 years. As of December 31, 2013, the aggregate intrinsic value was \$23.5 million for the 5.6 million exercisable shares. The intrinsic value is based on the Company's common stock fair value of \$6.34 per share as of December 31, 2013.

Table of Contents

## Restricted Stock Units

The following is a summary of restricted stock unit activity for 2013 and 2012 (in thousands, except per share data):

	Restricted Stock Units	Weighted Average Fair Value per Share at Grant Date
Outstanding at December 31, 2011	—	\$—
Granted	282	5.69
Vested	(20	) 2.00
Canceled	(14	) 6.90
Outstanding at December 31, 2012	248	5.53
Granted	285	6.92
Vested	(107	) 6.08
Canceled	(8	) 7.07
Outstanding at December 31, 2013	418	6.31

The intrinsic value of restricted stock units vested during 2013 and 2012 was \$0.8 million and \$39,000, respectively. As of December 31, 2013, the restricted stock units outstanding had a weighted average remaining contractual term of 1.6 years with an intrinsic value of \$2.6 million.

## ESPP

The following is a summary of ESPP activity for 2013 and 2012 and (in thousands, except per share data):

	Year Ended December 31,	
	2013	2012
Proceeds from common stock issued under ESPP	\$1,047	\$185
Shares of common stock issued	327	59
Weighted-average price per share	\$3.20	\$3.14

## 11. INCOME TAXES

No provision for U.S. federal or state income taxes has been made due to cumulative losses since the commencement of operations.

A provision for income taxes of \$0.9 million and \$0.7 million has been recognized for 2013 and 2012, respectively, related to the Company's foreign operations.

A reconciliation of total income tax expense and the amount computed by applying the federal statutory income tax rate of 34% to loss before income taxes for 2013, 2012 and 2011 is as follows (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Income tax benefit at statutory rate	\$(8,517	) \$(12,773	) \$(10,883
State taxes, net of federal benefit	(883	) (1,478	) (1,956
Change in valuation allowance	8,353	12,574	12,451
Stock-based compensation	1,191	1,128	479
Other	455	1,027	(91
Uncertain tax positions	264	173	—
Provision for income taxes	\$863	\$651	\$—



Table of Contents

A summary of significant components of the Company's deferred tax assets and liabilities as of December 31, 2013 and 2012 is as follows (in thousands):

	December 31,	
	2013	2012
Current:		
Reserves and allowances	\$14,521	\$11,523
Valuation allowance	(14,521	) (11,523
Total current	—	—
Non-current:		
Net operating losses	16,840	14,364
Stock-based compensation	1,531	919
Deferred revenue	2,730	1,425
Fixed assets and intangibles	11,670	10,301
Other	476	880
Valuation allowance	(33,245	) (27,889
Total non-current	2	—
Deferred tax liability	—	—
Net deferred tax assets	\$2	\$—

Due to the history of losses the Company has generated since inception, the Company believes that it is more-likely-than-not that all of the deferred tax assets will not be realized as of December 31, 2013. Therefore, the Company has recorded a full valuation allowance on its deferred tax assets.

The Company has net operating loss carryforwards for federal and California income tax purposes of approximately \$61.3 million and \$53.0 million, respectively, as of December 31, 2013. The federal and state net operating loss carryforwards, if not utilized, will expire beginning in 2026 and 2016, respectively. Utilization of the net operating loss carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended (the "Code"), and similar state provisions. The annual limitation may result in the expiration of net operating losses before utilization. The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since the Company became a "loss corporation" under the Code. Due to the existence of the valuation allowance, it is not expected that any possible limitation will have an impact on the results of operations or financial position of the Company.

A share option exercise may result in a tax deduction prior to the actual recognition of the related excess tax benefit because the Company has a net operating loss carryforward. The Company's net operating losses include \$201,000 of excess stock option benefits that will be reflected as a credit to additional paid-in capital when utilized.

The accounting for uncertain tax positions prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company is required to recognize in the financial statements the impact of a tax position, if that position is more-likely-than-not of being sustained on audit, based on the technical merits of the position. The gross unrecognized tax benefits have increased from \$160,000 at December 31, 2012 to \$376,000 at December 31, 2013, due to increases in tax positions for the current year of \$137,000 and increases in tax positions for prior year of \$79,000. The unrecognized tax benefits of \$376,000 at December 31, 2013, if recognized, would reduce the Company's annual effective tax rate. The Company also accrued interest and penalties of \$47,000 related to unrecognized tax benefits during 2013.

The Company does not have any tax positions for which it is reasonably possible the total amount of gross unrecognized tax benefits will increase or decrease over the next year. The unrecognized tax benefits may increase or change during the next year for items that arise in the ordinary course of business. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense.

The Company's tax returns continue to remain subject to examination by U.S. federal authorities for the years 2010 through 2013 and by California state authorities for the years 2009 through 2013.

Table of Contents

## 12. CONCENTRATION OF CREDIT RISK AND MAJOR CUSTOMERS

The Company is potentially subject to financial instrument concentration of credit risk through its cash and cash equivalents and accounts receivable. The Company places its cash and cash equivalents with high quality institutions and performs periodic evaluations of their relative credit standing. Accounts receivable can be potentially exposed to a concentration of credit risk with its major customers. As of December 31, 2013, the Company had amounts due from two customers that represented 16% and 10% of the total accounts receivable balance. As of December 31, 2012, its two largest accounts receivable balances represented 21% and 16% of the total accounts receivable balance. In 2013, three customers accounted for 15%, 14% and 11% of total net revenues. In 2012, two customers accounted for 16% and 11% of total net revenues. In 2011, three customers accounted for 17%, 11% and 10% of total net revenues.

## 13. NET LOSS PER SHARE ATTRIBUTABLE TO COMMON STOCKHOLDERS

In April 2012, all of the Company's then outstanding convertible preferred stock automatically converted into common stock in connection with its IPO. For periods that ended prior to the conversion, basic and diluted net income per common share were presented in conformity with the two-class method required for participating securities.

Under the two-class method, net loss is allocated between common shares and other participating securities to the extent that the securities are required to share in the losses. The Company's convertible preferred stock did not meet the definition of a participating security in periods of net losses as the convertible preferred stockholders did not have a contractual obligation to share in the Company's losses. Accordingly, net losses were attributable to common stockholders. Subsequent to the Company's IPO and the automatic conversion of the outstanding convertible preferred stock, the Company had no other participating securities and the two-class method is no longer applicable.

Basic net loss per share attributable to common stockholders is calculated by dividing net loss attributable to common stockholders by the weighted average number of shares outstanding for the period. Diluted net loss per share attributable to common stockholders is calculated by dividing net loss attributable to common stockholders by the weighted average number of common shares and potential dilutive common share equivalents outstanding during the period if the effect is dilutive. The Company's potentially dilutive common shares include convertible notes and convertible preferred stock prior to their conversion, outstanding stock options and warrants and non-vested restricted stock units.

The following table presents the potential common shares outstanding that were excluded from the computation of diluted net loss per share attributable to common stockholders for the periods presented because including them would have been anti-dilutive (in thousands):

	Year Ended December 31,		
	2013	2012	2011
Convertible preferred stock	—	—	25,171
Stock options to purchase common stock	8,196	8,174	6,256
Convertible notes	—	—	2,328
Unvested restricted stock units	381	248	—
Warrants to purchase common stock	308	331	143
Convertible preferred stock warrants	—	—	215
Total	8,885	8,753	34,113

## 14. SEGMENT AND GEOGRAPHIC INFORMATION



The Company's chief operating decision maker is the Chief Executive Officer. The Chief Executive Officer reviews financial information presented on a consolidated basis. The Company has one business activity, which entails the design, development, manufacture and sale of microinverter systems for the solar photovoltaic industry. There are no segment managers who are held accountable for operations, operating results or plans for levels or components below the consolidated unit level. Accordingly, management has determined that the Company has a single operating and reportable segment.

Table of Contents

The following tables present net revenues (based on the destination of shipments) and long-lived assets by geographic region as of and for the periods presented (in thousands):

## Net Revenues

	Year Ended December 31,		
	2013	2012	2011
United States	\$192,881	\$189,711	\$128,692
International	39,965	26,967	20,831
Total	\$232,846	\$216,678	\$149,523

## Long-Lived Assets

	As of December 31,		
	2013	2012	2011
United States	\$16,262	\$17,136	\$11,199
China	7,130	6,642	5,974
Other	1,461	1,763	1,238
Total	\$24,853	\$25,541	\$18,411

## 15. RELATED PARTY TRANSACTIONS

KPCB Holdings, Inc. ("KPCB"), as nominee for certain funds of Kleiner Perkins Caufield & Byers, owned approximately 11 percent of the Company's outstanding stock as of December 31, 2013. Revenues recognized from sales of microinverters to entities that are majority-owned by KPCB entities in 2013, 2012 and 2011 were \$2.7 million, \$16.8 million and \$6.4 million, respectively.

Table of Contents

## ENPHASE ENERGY, INC.

Quarterly Financial Information  
(Unaudited)  
(In thousands, except per share data)

	Quarters Ended for Fiscal 2013			
	March 31	June 30	September 30	December 31
Net revenues	\$45,577	\$58,167	\$62,046	\$67,056
Cost of revenues <sup>(1)</sup>	33,376	41,883	44,611	45,560
Gross profit	12,201	16,284	17,435	21,496
Operating expenses:				
Research and development	9,026	8,484	8,293	8,721
Sales and marketing	6,850	7,365	8,550	8,315
General and administrative	6,036	5,926	5,937	6,071
Total operating expenses	21,912	21,775	22,780	23,107
Loss from operations	(9,711)	(5,491)	(5,345)	(1,611)
Other expense, net	(513)	(781)	(815)	(783)
Loss before income taxes	(10,224)	(6,272)	(6,160)	(2,394)
Provision for income taxes	(182)	(124)	(141)	(416)
Net loss	\$(10,406)	\$(6,396)	\$(6,301)	\$(2,810)
Net loss per share, basic and diluted	\$(0.25)	\$(0.15)	\$(0.15)	\$(0.07)
	Quarters Ended for Fiscal 2012			
	March 31	June 30	September 30	December 31
Net revenues	\$42,600	\$55,697	\$60,813	\$57,568
Cost of revenues <sup>(1)</sup>	33,293	42,096	44,489	41,512
Gross profit	9,307	13,601	16,324	16,056
Operating expenses:				
Research and development	7,842	8,655	10,571	8,533
Sales and marketing	5,049	6,360	7,039	7,525
General and administrative	5,696	6,091	6,911	6,177
Total operating expenses	18,587	21,106	24,521	22,235
Loss from operations	(9,280)	(7,505)	(8,197)	(6,179)
Other expense, net	(839)	(3,729)	(580)	(1,258)
Loss before income taxes	(10,119)	(11,234)	(8,777)	(7,437)
Provision for income taxes	(65)	(151)	(130)	(305)
Net loss	\$(10,184)	\$(11,385)	\$(8,907)	\$(7,742)
Net loss per share, basic and diluted	\$(5.97)	\$(0.29)	\$(0.22)	\$(0.19)

(1) See Note 5 to the Consolidated Financial Statements for a description of changes in estimates related to warranty expense in 2013 and 2012.

Table of Contents

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure  
None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation required by the Exchange Act, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act, as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, as defined in Rule 13a-15(f) of the Exchange Act. Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2013 based on criteria set forth in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework). As a result of this assessment, management concluded that, as of December 31, 2013, our internal control over financial reporting was effective.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act. As a result, we are exempt from the auditor attestation requirements related to internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. In addition, for as long as we remain an "emerging growth company," we will continue to be exempt from the auditor attestation requirement in the assessment of the effectiveness of our internal control over financial reporting through the end of fiscal 2017.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the most recent fiscal quarter ended December 31, 2013 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Controls

Our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives as specified above. Management does not expect, however, that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

Item 9B. Other Information

None.

Table of Contents

PART III

Item 10. Directors and Executive Officers and Corporate Governance

The information required regarding our directors is incorporated herein by reference from the information contained in the section entitled “Proposal 1-Election of Directors” in our definitive Proxy Statement for the 2014 Annual Meeting of Stockholders (our “Proxy Statement”), a copy of which will be filed with the Securities and Exchange Commission on or before April 30, 2014.

The information required regarding our executive officers is incorporated herein by reference from the information contained in the section entitled “Management” in our Proxy Statement.

The information required regarding Section 16(a) beneficial ownership reporting compliance is incorporated by reference from the information contained in the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” in our Proxy Statement.

The information required with respect to procedures by which security holders may recommend nominees to our board of directors, and the composition of our Audit Committee, and whether we have an “audit committee financial expert,” is incorporated by reference from the information contained in the section entitled “Information Regarding the Board of Directors and Corporate Governance” in our Proxy Statement.

Code of Conduct

We have a written code of conduct that applies to all our executive officers, directors and employees. Our Code of Conduct is available on our website at <http://investor.enphase.com/governance.cfm>. A copy of our Code of Conduct may also be obtained free of charge by writing to our Assistant Secretary, Enphase Energy, Inc., 1420 N. McDowell Blvd., Petaluma, CA 94954. If we make any substantive amendments to our Code of Conduct or grant any waiver from a provision of the Code of Conduct to any executive officer or director, we intend to promptly disclose the nature of the amendment or waiver on our website.

Item 11. Executive Compensation

The information required regarding the compensation of our directors and executive officers is incorporated herein by reference from the information contained in the sections entitled “Executive Compensation,” “Director Compensation,” “Compensation Committee Report” and “Compensation Committee Interlocks and Insider Participation” in our Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required regarding security ownership of our 5% or greater stockholders and of our directors and management is incorporated herein by reference from the information contained in the section entitled “Security Ownership of Certain Beneficial Owners and Management” in our Proxy Statement.

Equity Compensation Plan Information

The information required regarding securities authorized for issuance under our equity compensation plans is incorporated herein by reference from the information contained in the section entitled “Employee Benefit Plans” in our Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required regarding related transactions is incorporated herein by reference from the information contained in the section entitled “Transactions With Related Persons” and, with respect to director independence, the section entitled “Proposal 1-Election of Directors” in our Proxy Statement.



Table of Contents

Item 14. Principal Accounting Fees and Services

The information required is incorporated herein by reference from the information contained in the sections entitled “Principal Accountant Fees and Services” and “Pre-Approval Policies and Procedures” in the section entitled “Proposal 2-Ratification of Selection of Independent Registered Public Accounting Firm” in our Proxy Statement.

Table of Contents

PART IV

Item 15. Exhibits, Financial Statement Schedules

Consolidated Financial Statements

The information concerning our consolidated financial statements, and Report of Independent Registered Public Accounting Firm required by this Item is incorporated by reference herein to the section of this Annual Report on Form 10-K in Item 8, Consolidated Financial Statements and Supplementary Data.

No schedules are provided because they are not applicable, not required under the instructions, or the requested information is shown in the financial statements or related notes thereto.

Exhibits

The exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K.

70

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Table of Contents

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on March 4, 2014.

Enphase Energy, Inc.

By: /s/ PAUL B. NAHI  
Paul B. Nahi  
President and Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul B. Nahi and Kris Sennesael, jointly and severally, 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 any and all amendments to this Annual Report on Form 10-K 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 full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises hereby ratifying and confirming all that said attorneys-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities on the dates indicated.

Signature	Title	Date
/s/ PAUL B. NAHI Paul B. Nahi	President and Chief Executive Officer (Principal Executive Officer)	March 4, 2014
/s/ KRIS SENNESAEL Kris Sennesael	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	March 4, 2014
/s/ NEAL DEMPSEY Neal Dempsey	Director	March 4, 2014
/s/ STEVEN J. GOMO Steven J. Gomo	Director	March 4, 2014
/s/ BENJAMIN KORTLANG Benjamin Kortlang	Director	March 4, 2014
/s/ JAMESON J. MCJUNKIN Jameson J. McJunkin	Director	March 4, 2014
/s/ RICHARD MORA Richard Mora	Director	March 4, 2014
/s/ ROBERT SCHWARTZ Robert Schwartz	Director	March 4, 2014
/s/ JOHN H. WEBER John H. Weber	Director	March 4, 2014



Table of Contents

EXHIBIT INDEX

Exhibit No. Description of Exhibit

3.1	Amended and Restated Certificate of Incorporation of Enphase Energy, Inc. <sup>(1)</sup>
3.2	Amended and Restated Bylaws of Enphase Energy, Inc. <sup>(2)</sup>
4.1	Specimen Common Stock Certificate of Enphase Energy, Inc. <sup>(3)</sup>
4.2	2010 Amended and Restated Investors' Rights Agreement by and between Enphase Energy, Inc. and the investors listed on Exhibit A thereto, dated March 15, 2010, as amended. <sup>(3)</sup>
4.4	Warrant to Purchase Stock, between Enphase Energy, Inc. and Compass Horizon Funding Company LLC, dated March 11, 2010. <sup>(3)</sup>
4.5	Warrant to Purchase Stock, between Enphase Energy, Inc. and Horizon Technology Finance Corporation, dated March 25, 2011. <sup>(3)</sup>
4.6	Warrant Agreement to Purchase Stock, between Enphase Energy, Inc. and Hercules Technology Growth Capital, Inc., dated June 13, 2011. <sup>(3)</sup>
4.7	Form of June 2011 Warrant to Purchase Common Stock of Enphase Energy, Inc., pursuant to that certain Amended and Restated Subordinated Convertible Loan Facility and Security Agreement. <sup>(3)</sup>
4.8	Form of November 2011 Warrant to Purchase Common Stock of Enphase Energy, Inc., pursuant to that certain Amended and Restated Subordinated Convertible Loan Facility and Security Agreement. <sup>(3)</sup>
10.1	Form of Indemnification Agreement by and between Enphase Energy, Inc. and each of its directors and officers. <sup>(3)</sup>
10.2	2006 Equity Incentive Plan, as amended, and related documents. <sup>(4) +</sup>
10.3	2011 Equity Incentive Plan and forms of agreement thereunder. <sup>(5) +</sup>
10.4	2011 Employee Stock Purchase Plan. <sup>(6) +</sup>
10.5	Offer Letter by and between Enphase Energy, Inc. and Paul B. Nahi, dated January 1, 2007, as amended. <sup>(3)</sup>
10.8	Offer Letter by and between Enphase Energy, Inc. and Jeff Loebbaka, dated April 19, 2010. <sup>(3)</sup>
10.9	Employment Agreement by and between Enphase Energy, Inc. and Raghuveer R. Belur, dated March 21, 2006, as amended. <sup>(3)</sup>
10.10	Amended and Restated Venture Loan and Security Agreement by and between Enphase Energy, Inc., Horizon Technology Finance Corporation and Horizon Credit I LLC, dated March 25, 2011, as amended. <sup>(3)</sup>
10.11	Amended and Restated Loan and Security Agreement by and between Enphase Energy, Inc., Bridge Bank, National Association and Comerica Bank, dated March 24, 2011, as amended. <sup>(3)</sup>
10.12	Loan and Security Agreement by and between Enphase Energy, Inc. and Hercules Technology Growth Capital, Inc., dated June 13, 2011, as amended. <sup>(3)</sup>
10.13	Waterfront Office Building Full Service Lease by and between Enphase Energy, Inc. and Petaluma Theatre District, LLC, dated February 3, 2008, as amended. <sup>(3)</sup>
10.14	Redwood Business Park NNN Lease by and between Enphase Energy, Inc. and Sequoia Center LLC, dated June 3, 2011 (1400 North McDowell Boulevard), as amended. <sup>(3)</sup>
10.15	Redwood Business Park NNN Lease by and between Enphase Energy, Inc. and Sequoia Center LLC, dated June 3, 2011 (1420 North McDowell Boulevard), as amended. <sup>(3)</sup>
10.16	Cooperation Agreement "AC cabling system for solar micro-inverter" by and among Enphase Energy, Inc., and Phoenix Contact GmbH & Co. KG and Phoenix Contact USA, Inc., dated December 7, 2010. <sup>(3) †</sup>
10.17	Flextronics Logistics Services Agreement by and between Enphase Energy, Inc. and Flextronics America, LLC, dated May 1, 2009. <sup>(3) †</sup>
10.18	Flextronics Manufacturing Services Agreement by and between Enphase Energy, Inc. and Flextronics Industrial, Ltd., dated March 1, 2009, as amended. <sup>(3) †</sup>
10.19	

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	Master Development and Production Agreement by and between Enphase Energy, Inc. and Fujitsu Microelectronics America, Inc., dated August 19, 2009. <sup>(3)</sup> †
10.20	License and Technology Transfer Agreement by and between Enphase Energy, Inc. and Ariane Controls, Inc., dated December 21, 2007. <sup>(3)</sup> †
10.21	Software License Agreement by and between PVI Solutions, Inc. (subsequently known as Enphase Energy, Inc.) and DCD, Digital Core Design, dated May 8, 2007, as amended. <sup>(3)</sup> †
10.23	Executive Severance Agreement by and between Enphase Energy, Inc. and Paul B. Nahi, dated June 14, 2011. <sup>(3)</sup> +
10.26	Change in Control and Severance Agreement by and between Enphase Energy, Inc. and Jeff Loebbaka, dated June 14, 2011. <sup>(3)</sup> +
10.27	Executive Severance Agreement by and between Enphase Energy, Inc. and Raghuveer R. Belur, dated June 14, 2011. <sup>(3)</sup> +
10.28	Non-employee Director Compensation Policy. <sup>(3)</sup> +
10.38	Loan and Security Modification Agreement between Bridge Bank, National Association, Comerica Bank, and Enphase Energy, Inc. dated June 29, 2012. <sup>(8)</sup>
10.39	Third Amendment of Amended and Restated Venture Loan and Security Agreement by and among Horizon Technology Finance Corporation, Horizon Credit I LLC, and Enphase Energy, Inc., dated June 29, 2012. <sup>(8)</sup>
10.40	Second Amendment to Redwood Business Park NNN Lease, between Enphase Energy, Inc. & Sequoia Center LLC, dated July 3, 2012. <sup>(9)</sup>
10.41	Separation Agreement, dated August 6, 2012, by and between Sanjeev Kumar and Enphase Energy, Inc. <sup>(9)</sup> +
10.42	Amendment No. 4 to Loan and Security Agreement, dated July 27, 2012, by and between Hercules Technology Growth Capital, Inc. and Enphase Energy, Inc. <sup>(9)</sup>
10.43	Offer Letter by and between Enphase Energy, Inc. and Kris Sennesael, dated September 17, 2012. <sup>(9)</sup> +
10.44	Offer Letter by and between Enphase Energy, Inc. and Stephen Lapointe, dated July 31, 2012. <sup>(9)</sup> +
10.47	Credit Agreement by and among the lenders identified on the signature pages thereof, Wells Fargo Bank, N.A., as an agent for the lenders, and Enphase Energy, Inc. dated November 7, 2012. <sup>(10)</sup>
10.48	Loan and Security Agreement by and between Enphase Energy, Inc., certain of its subsidiaries and Hercules Technology Growth Capital, Inc. dated November 7, 2012. <sup>(11)</sup>
10.49	2013 Performance Bonus Program Summary. <sup>(12)</sup> +
10.50	Severance and Change in Control Benefit Plan. <sup>(7)</sup>
10.51	Amendment No. 1 to Credit Agreement by and between Enphase Energy, Inc. and Wells Fargo Bank, National Association, dated February 14, 2014.
21.1	List of subsidiaries of the Registrant
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a).
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
101.INS	XBRL Instance Document.**
101.SCH	XBRL Taxonomy Extension Schema Document.**
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document**
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.**
101.PRE	XBRL Taxonomy Extension Presentation Document.**

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Previously filed as Exhibit 3.1 to the Current Report on Form 8-K (File No. 001-35480), filed with the Securities and Exchange Commission on April 6, 2012, and incorporated by reference herein.

- (2) Previously filed as Exhibit 3.5 to Amendment No. 7 to the Registration Statement on Form S-1/A (File No. 333-174925), filed with the Securities and Exchange Commission on March 12, 2012, and incorporated by reference herein.
- (3) Previously filed as the like-numbered exhibit to the Registration Statement on Form S-1/A (File No. 333-174925), and incorporated herein by reference.
- (4) Previously filed as Exhibit 99.1 to the Registration Statement on Form S-8 (File No. 333-181382), filed with the Securities and Exchange Commission on May 14, 2012, and incorporated herein by reference.
- (5) Previously filed as Exhibit 99.2 to the Registration Statement on Form S-8 (File No. 333-181382), filed with the Securities and Exchange Commission on May 14, 2012, and incorporated herein by reference.
- (6) Previously filed as Exhibit 99.3 to the Registration Statement on Form S-8 (File No. 333-181382), filed with the Securities and Exchange Commission on May 14, 2012, and incorporated herein by reference.
- (7) Previously filed as as the like numbered exhibit to the Quarterly Report on Form 10-Q (File No. 001-35480), filed with the Securities and Exchange Commission on May 8, 2013.
- (8) Previously filed as the like numbered exhibit to the Quarterly Report on Form 10-Q (File No. 001-35480), filed with the Securities and Exchange Commission on August 13, 2012, and incorporated by reference herein.
- (9) Previously filed as the like numbered exhibit to the Quarterly Report on Form 10-Q (File No. 001-35480), filed with the Securities and Exchange Commission on November 13, 2012, and incorporated by reference herein.
- (10) Previously filed as Exhibit 10.1 to the Current Report on Form 8-K (File No. 001-35480), filed with the Securities and Exchange Commission on November 13, 2012, and incorporated by reference herein.
- (11) Previously filed as Exhibit 10.2 to the Current Report on Form 8-K (File No. 001-35480), filed with the Securities and Exchange Commission on November 13, 2012, and incorporated by reference herein.
- (12) Previously filed as Exhibit 10.1 to the Current Report on Form 8-K (File No. 001-35480), filed with the Securities and Exchange Commission on January 29, 2013, and incorporated by reference herein.
- (13) Previously filed as the like numbered exhibit to the Current Report on Form 8-K (File No. 001-35480), filed with the Securities and Exchange Commission on February 18, 2014.

+Management compensatory plan or arrangement.

Material in the exhibit marked with a “\*\*\*\*” has been omitted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Securities and Exchange Commission.

The certifications attached as Exhibit 32.1 accompany this quarterly report on Form 10-K pursuant to 18 U.S.C.

\*Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed “filed” by Enphase Energy, Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

Pursuant to applicable securities laws and regulations, Enphase Energy, Inc. is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and are not subject to liability under any anti-fraud provisions of the federal securities laws as long as Enphase Energy, Inc. has made a good faith attempt to comply with the submission requirements and promptly amend the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. In accordance with

\*\*Rule 406T of Regulation S-T, the information in these exhibits is furnished and deemed not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such filing.