

ENOVA SYSTEMS INC
Form 424B5
April 26, 2012

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-176480

PROSPECTUS SUPPLEMENT
(To the Prospectus dated August 30, 2011)

\$3,602,000 in Shares of Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to \$3,602,000 in shares of our common stock, no par value per share, to Lincoln Park Capital Fund, LLC, or Lincoln Park, under a purchase agreement entered into on April 24, 2012.

The shares to be offered pursuant to this prospectus supplement include:

- \$250,000 worth of shares of our common stock at a price per share of \$0.20;
 - up to \$3,150,000 worth of shares of our common stock in purchases of up to 200,000 shares per purchase from time to time over a 36-month period at our discretion, at a per share purchase price equal to, depending on the type of purchase, either
 - (1) the lower of (a) the lowest sale price of our common stock on the purchase date of such shares and (b) the arithmetic average of the three lowest closing sale prices of our common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of such shares; provided that in no event will such shares be sold at a price of less than \$0.13 per share, or
 - (2) the lower of (a) the lowest sale price our common stock on the purchase date of such shares, or (b) the lowest purchase price during the previous 10 business days prior to the date that Lincoln Park received notice of the purchase; provided the most recent closing price of our common stock on the purchase date is not less than \$0.20 and provided further that in no event will shares be sold at a price of less than \$0.13 per share, and
 - up to 567,681 shares of our common stock to be issued to Lincoln Park, at no cost to Lincoln Park, as consideration for its commitment to purchase the shares hereunder, including (i) 281,030 shares of our common stock as initial commitment shares on the date of this prospectus supplement, and (ii) 286,651 shares of our common stock as additional commitment shares in connection with each purchase at a formula described herein.
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This prospectus supplement and the accompanying prospectus also cover the resale of these shares by Lincoln Park to the public.

Our common stock is traded on the NYSE Amex under the symbol “ENA.” On April 23, 2012, the last reported sale price of our common stock on the NYSE Amex was \$0.23.

As of February 28, 2012, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$3,605,692, based on 42,765,223 shares of outstanding common stock, of which 27,736,099 shares were held by non-affiliates, and a per share price of \$0.39 based on the closing sale price of our common stock on such date. During the period of 12 calendar months immediately prior to, and including, the date of this prospectus supplement, we have not sold any shares of our common stock pursuant to General Instruction I.B.6. of Form S-3.

| | Per Share | Total |
|---------------------------------------|-----------|--------------|
| Offering Price to Lincoln Park | \$ 0.20 | \$ 250,000 |
| | Unknown | \$ 3,150,000 |
| Commitment Shares to Lincoln Park 1 | \$ 0.365 | \$ 202,000 |
| Proceeds to us, before other expenses | – | \$ 3,400,000 |

1 The price per Commitment Share equals the average of the closing sale prices of our common stock for the twelve (12) consecutive business days prior to March 26, 2012.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should review carefully the risks and uncertainties described under the heading “Risk Factors” on page S-8 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is April 24, 2012.

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No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement or the accompanying prospectus. You must not rely on any unauthorized information or representations. This prospectus supplement and the accompanying prospectus are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement and the accompanying prospectus is current only as of their respective dates.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Each time we sell securities under the accompanying base prospectus we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the price, the amount of securities being offered and the plan of distribution. The shelf registration statement, as amended, was filed with the SEC on August 24, 2011, and was declared effective by the SEC on August 30, 2011. This prospectus supplement describes the specific details regarding this offering, including the price, the amount of common stock being offered, the risks of investing in our common stock and arrangements with Lincoln Park. The accompanying base prospectus provides general information about us, some of which, such as the section entitled “Plan of Distribution,” may not apply to this offering.

If information in this prospectus supplement is inconsistent with the accompanying base prospectus or the information incorporated by reference, you should rely on this prospectus supplement. This prospectus supplement, together with the base prospectus and the documents incorporated by reference into this prospectus supplement and the base prospectus, includes all material information relating to this offering. We have not authorized anyone to provide you with different or additional information. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should carefully read this prospectus supplement, the base prospectus, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find More Information” before making an investment decision.

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement and the accompanying base prospectus carefully, including the section entitled “Risk Factors” beginning on page S-8 and our financial statements and the related notes and the other information incorporated by reference into this prospectus supplement and the accompanying prospectus before making an investment decision.

OUR BUSINESS

Our Company

Enova believes it is a leader in the development, design and production of proprietary, power train systems and related components for electric and hybrid electric buses and medium and heavy duty commercial vehicles. Electric drive systems are comprised of an electric motor, an electronics control unit and a gear unit which power a vehicle. Hybrid electric systems, which are similar to pure electric drive systems, contain an internal combustion engine in addition to the electric motor, and may eliminate external recharging of the battery system. A hydrogen fuel cell based system is similar to a hybrid system, except that instead of an internal combustion engine, a fuel cell is utilized as the power source. A fuel cell is a system which combines hydrogen and oxygen in a chemical process to produce electricity.

A fundamental element of our strategy is to develop and produce advanced proprietary software and hardware for applications in these alternative power markets. Our focus is powertrain systems including digital power conversion, power management and system integration, focusing chiefly on vehicle power generation.

Specifically, we develop, design and produce drive systems and related components for electric, hybrid electric and fuel cell powered vehicles in both the new and retrofit markets. We also perform internal research and development and funded third party research and development to augment our product development and support our customers.

Our product development strategy is to design and introduce to market successively advanced products, each based on our core technical competencies. In each of our product/market segments, we provide products and services to leverage our core competencies in digital power management, power conversion and system integration. We believe that the underlying technical requirements shared among the market segments will allow us to more quickly transition from one emerging market to the next, with the goal of capturing early market share.

Our primary market focus centers on aligning ourselves with key customers and integrating with original equipment manufacturers in our target markets. We believe that alliances will result in the latest technology being implemented and customer requirements being met, with an optimized level of additional time and expense. As we penetrate new market areas, we are continually refining both our market strategy and our product line to maintain our leading edge in power management and conversion systems for vehicle applications.

The Company, previously known as U.S. Electricar, Inc., a California corporation, was incorporated on July 30, 1976. Our address is 1560 West 190th Street, Torrance, California 90501 and our telephone number is 310-527-2800. Our website address is www.enovasystems.com. Information on our website is not incorporated by reference into this prospectus and does not constitute part of this prospectus.

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Our Financial Condition

We have experienced and continue to experience operating losses and negative cash flows from operations, as well as an ongoing requirement for substantial additional capital investment. Our annual report on Form 10-K for the fiscal year ended December 31, 2011 filed included an audit opinion containing a going concern qualification. At December 31, 2011, the Company had an accumulated deficit of approximately \$151.1 million, working capital of approximately \$6.8 million and shareholders' equity of approximately \$5.3 million. Over the past years, we have been funded through a combination of debt, lease financing and public equity offerings. As of December 31, 2011, the Company had approximately \$3.1 million in cash and cash equivalents.

We expect that the Company will need to raise additional capital to fully pursue its business plan over the long term. There can be no assurance as to the availability or terms upon which such financing and capital might be available. If we are not successful in our efforts to raise additional funds, we may be required to delay, reduce the scope of, or eliminate one or more of its development programs. Without substantial reductions or eliminations of its development programs, we do not expect that our cash and cash equivalents will be sufficient to fund our operating and capital needs for the twelve months following December 31, 2011.

RECENT DEVELOPMENTS

Agreements with Lincoln Park Capital Fund, LLC

We have entered into two purchase agreements and a registration rights agreement with Lincoln Park Capital Fund, LLC, or Lincoln Park.

On April 24, 2012, we entered into a purchase agreement with Lincoln Park, or the \$3,400,000 Purchase Agreement, pursuant to which Lincoln Park has agreed to purchase from us the securities being offered pursuant to this prospectus supplement for gross proceeds to us of up to \$3,400,000 subject to certain limitations. Under the terms of the \$3,400,000 Purchase Agreement, Lincoln Park will initially purchase \$250,000 worth of shares of our common stock at a price per share of \$0.20. Thereafter, we may, from time to time and at our sole discretion during a 36-month period, subject to the conditions of the \$3,400,000 Purchase Agreement, direct Lincoln Park to purchase shares of our common stock up to an aggregate amount of \$3,150,000. The amount we receive and the purchase price depends on whether the purchase is a Regular Purchase or an Accelerated Purchase. By means of a Regular Purchase, which may occur no more frequently than every two business days, we may direct Lincoln Park to purchase up to 200,000 shares of our common stock at the Regular Purchase Price; provided that in no event will such shares be sold to Lincoln Park at a price of less than \$0.13 per share. The Regular Purchase Price will be equal to the lower of (a) the lowest sale price for our common stock reported on the NYSE Amex on the purchase date of such shares or (b) the arithmetic average of the three lowest closing sale prices for our common stock during the 12 consecutive business days ending on the business day immediately preceding the purchase date of such shares. Additionally, by means of an Accelerated Purchase, which also may occur no more frequently than every two business days, we may direct Lincoln Park to purchase up to 200,000 additional shares of our common stock at the Accelerated Purchase Price; provided that the most recent closing price on the NYSE Amex of our shares of common stock is not less than \$0.20 on the purchase date and provided further that in no event will such shares be sold to Lincoln Park at a price of less than \$0.13 per share. The Accelerated Purchase Price will be equal to the lower of (a) the lowest sale price for our common stock reported on the NYSE Amex on the purchase date of such shares, or (b) the lowest Regular Purchase Price during the previous 10 Business Days prior to the date that the Accelerated Purchase notice was received by Lincoln Park. The Regular Purchase Price or Accelerated Purchase Price will be equitably adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the business days used to compute the Regular Purchase Price or Accelerated Purchase Price.

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As consideration for Lincoln Park's commitment to purchase our common stock pursuant to the \$3,400,000 Purchase Agreement, we will issue to Lincoln Park 281,030 shares of our common stock, or Initial Commitment Shares, on the date of the prospectus supplement, at no cost to Lincoln Park, as consideration for its commitment to purchase shares pursuant to the \$3,400,000 Purchase Agreement. As further consideration to Lincoln Park, in connection with each of its additional purchases of shares pursuant to the \$3,400,000 Purchase Agreement, we will issue to Lincoln Park an additional number of shares, or Additional Commitment Shares, equal to the product of (x) 286,651 and (y) a fraction, the numerator of which is the purchase amount for the relevant shares purchased by the Lincoln Park and the denominator of which is \$3,400,000. For example, if we elect, at our sole discretion, to require Lincoln Park to purchase \$34,000 worth of our common stock, then we would issue 2867 shares as a pro rata additional commitment fee, which is the product of \$34,000, the amount we have elected to sell, divided by \$3,400,000, the total amount we can sell to Lincoln Park under the \$3,400,000 Purchase Agreement, multiplied by 286,651, the maximum number of Additional Commitment Shares. The Additional Commitment Shares will only be issued pursuant to this formula if, as and when we elect to sell shares of our common stock to Lincoln Park. Lincoln Park may not assign or transfer its rights and obligations under the \$3,400,000 Purchase Agreement.

All of the aggregate 567,681 commitment shares issuable to Lincoln Park are being offered pursuant to this prospectus supplement.

In addition, on April 23, 2012, we entered into a purchase agreement, or the \$6,600,000 Purchase Agreement, and a Registration Rights Agreement, or the Registration Agreement, with Lincoln Park, pursuant to which Lincoln Park has agreed to purchase from us up to \$6,600,000 of shares of our common stock subject to certain limitations from time to time over the 36-month period commencing on the date of the effectiveness of a registration statement for the resale of such shares that we must file with the SEC pursuant to the Registration Agreement. We do not have the right to commence any sales to Lincoln Park under the \$6,600,000 Purchase Agreement until the SEC has declared effective the resale registration statement. After such registration statement is declared effective, and subject to the satisfaction of the other conditions of the \$6,600,000 Purchase Agreement, we may direct Lincoln Park from time to time and at our sole discretion to purchase shares of our common stock up to an aggregate amount of \$6,600,000. The \$6,600,000 Purchase Agreement contains similar Regular Purchase and Accelerated Purchase share limitations, pricing formulas, and minimum prices as in the \$3,400,000 Purchase Agreement. None of the shares to be purchased by Lincoln Park pursuant to the \$6,600,000 Purchase Agreement are covered by this prospectus supplement but, pursuant to the Registration Agreement, must be registered for resale under the resale registration statement that we must file with the SEC pursuant to the Registration Agreement.

As consideration for Lincoln Park's commitment to purchase our common stock pursuant to the \$6,600,000 Purchase Agreement, we will issue a number of shares, or Commitment Shares, equal to the product of (x) 556,440 shares and (y) a fraction, the numerator of which is the purchase amount for the relevant shares purchased by the Lincoln Park and the denominator of which is \$6,600,000. The 556,440 Commitment Shares are not covered by this prospectus supplement but, pursuant to the Registration Agreement, must be registered for resale under the registration statement that we are required to file with the SEC pursuant to the Registration Agreement.

NYSE Amex Deficiency Letter

On April 17, 2012, the Company received notice (the "Notice") from the NYSE Amex LLC indicating that the Company is not in compliance with one of NYSE Amex's continued listing standards as set forth in Part 10 of the Company Guide (the "Company Guide"), and the Company has therefore become subject to the procedures and requirements of Section 1009 of the Company Guide. Specifically, the Company is not in compliance with Section 1003(a)(iii) with stockholders' equity of less than \$6,000,000 and losses from continuing operations and/or net losses in five consecutive fiscal years.

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The Company has been afforded the opportunity to submit a plan of compliance to NYSE Amex by May 17, 2012 addressing how the Company intends to regain compliance with the continued listing standards of the Company Guide within a maximum of 18 months (the "Plan Period"). The Company is taking steps to prepare and submit such a plan to the NYSE Amex on or before May 17, 2012. Per the Notice, if the Company does not submit such a plan or the plan is not accepted by the NYSE Amex, the Company will become subject to delisting proceedings. Furthermore, if the plan is accepted but the Company is not in compliance with the continued listing standards of the Company Guide by October 15, 2013 or if the Company is not making progress consistent with the plan during the Plan Period, the NYSE Amex staff will initiate delisting procedures as appropriate. In such event, the Company may appeal an Exchange staff determination to initiate delisting proceedings in accordance with Section 1010 and Part 12 of the Company Guide.

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THE OFFERING

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying prospectus. For a more complete description of the terms of our common stock, see the “Description of the Securities We Are Offering” section in this prospectus supplement.

| | |
|---|--|
| Securities We Are Offering | <ul style="list-style-type: none"> · 1,250,000 shares of our common stock, no par value per share, to be sold to Lincoln Park at a price per share of \$0.20 for an aggregate amount of \$250,000 · up to \$3,150,000 worth of shares of our common stock, no par value per share, subject to certain limitations, which may be sold to Lincoln Park, from time to time and at our discretion over a 36-month period commencing on the date of this prospectus supplement, (i) in Regular Purchases at the Regular Purchase Price; provided that in no event will such shares be sold to Lincoln Park at a price of less than \$0.13 per share, and/or (ii) in Accelerated Purchases at the Accelerated Purchase Price; provided the closing price of our common stock is not less than \$0.20 on the purchase date and provided further that in no event will shares be sold at a price of less than \$0.13 per share · 281,030 shares of our common stock (the Initial Commitment Shares) to be issued to Lincoln Park on the date of this prospectus supplement at no cost to Lincoln Park, as consideration for its commitment to purchase our common stock · 286,651 shares of our common stock (the Additional Commitment Shares) to be issued to Lincoln Park in connection with each purchase of our shares and in an amount equal to the product of (x) 286,651 and (y) a fraction, the numerator of which is the purchase amount for the relevant shares purchased by the Lincoln Park and the denominator of which is \$3,400,000 |
| Common Stock Outstanding Immediately Before This Offering | 42,765,223 shares |
| NYSE Amex Symbol | ENA |
| Use of Proceeds | Working capital and general corporate purposes |
| Risk Factors | See “Risk Factors” and other information included in this prospectus supplement, or incorporated herein by reference, for a discussion of factors you should carefully consider before deciding to invest in our common stock |

Except as otherwise indicated, the information contained in this prospectus supplement assumes the sale of all of the shares offered hereby.

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The number of shares of our common stock outstanding as of April 24, 2012, which was 42,765,223, excludes:

- 11,250,000 shares of our common stock issuable upon exercise of warrants exercisable at a price of \$0.22;
- 83,211 shares of our common stock issuable upon conversion of our Series A and Series B preferred stock;
- 2,464,092 shares of our common stock issuable upon exercise of options outstanding, of which approximately 1,877,642 shares are exercisable; and
- 494,390 shares of our common stock available for future grants under our equity compensation plans.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should carefully consider the following risk factors as well as all other information contained in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference, including our financial statements and the related notes. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial which could also impair our business and financial position. If any of the events described below were to occur, our financial condition, our ability to access capital resources, our results of operations and/or our future growth prospects could be materially and adversely affected and the market price of our common stock could decline. As a result you could lose some or all of any investment you may have made or may make in our common stock.

Risks Related to this Offering and our Common Stock

The sale or issuance of our common stock to Lincoln Park may cause dilution and the sale of the shares of common stock acquired by Lincoln Park, or the perception that such sales may occur, could cause the price of our common stock to fall

On April 24, 2012, we entered into the \$3,400,000 Purchase Agreement with Lincoln Park pursuant to which we may issue to Lincoln Park from time to time over a 36-month period the securities being offered pursuant to this prospectus supplement including up to \$3,400,000 worth of our common stock subject to certain limitations and 567, 681 shares to be issued to Lincoln Park at no cost as a fee for its commitment to purchase such shares. In addition, on April 23, 2012, we entered into the \$6,600,000 Purchase Agreement with Lincoln Park, pursuant to which Lincoln Park has committed to purchase an additional \$6,600,000 worth of our common stock, from time to time over a 36-month period commencing after the SEC has declared effective a registration statement for the resale of such shares that we must file with the SEC within 120 business days after the date of such agreement.

Other than Lincoln Park's initial purchase under the \$3,400,000 Purchase Agreement of 1,250,000 shares of our common stock at a price per share of \$0.20 for an aggregate amount of \$250,000, or the Initial Purchase, the purchase price for the shares that we may sell to Lincoln Park will fluctuate based on the price of our common stock. It is anticipated that shares registered by this prospectus supplement will be sold over a period of up to 36 months after the date of this prospectus supplement. Depending on market liquidity at the time, sales of shares we issue to Lincoln Park may cause the trading price of our common stock to fall.

We generally have the right to control the timing and amount of any sales of our shares to Lincoln Park, except that, pursuant to the terms of our agreements with Lincoln Park, we would be unable to sell shares to Lincoln Park if and when the market price of our common stock is below \$0.13 per share. Sales of our common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by us. As such, other than the Initial Purchase, Lincoln Park may ultimately purchase all, some or none of the shares of our common stock offered pursuant to this prospectus supplement and, after it has acquired shares, Lincoln Park may sell all, some or none of those shares. Therefore, sales to Lincoln Park by us pursuant to either the \$3,400,000 Purchase Agreement or the \$6,600,000 Purchase Agreement could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

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You may experience immediate dilution in the book value per share of the common stock you purchase

Because the price per share of our common stock being offered pursuant to this prospectus supplement may be substantially higher than the book value per share of our common stock, you may suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. After giving effect to the sale by us of \$3,400,000 worth of shares of our common stock in this offering, and based on an estimated public offering price of \$0.23 per share in this offering and a pro forma net tangible book value per share of our common stock of \$0.15 as of December 31, 2011, if you purchase securities in this offering, you will suffer immediate and substantial dilution in the net tangible book value of the common stock purchased. See “Dilution” on page S-15 for a more detailed discussion of the dilution you may incur in connection with this offering.

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively

We have not designated any portion of the net proceeds from this offering to be used for any particular purpose. The Company expects to use the net proceeds from the offering only for working capital and general corporate purposes, and does not intend to use the net proceeds for the satisfaction of any portion of the Company’s debt (other than payment of trade payables in the ordinary course of the Company’s business and prior practices). Accordingly, our management will have broad discretion as to the application of the net proceeds from this offering, and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock.

One group of our shareholders holds a large percentage of our outstanding common stock, and, should they choose to do so, may have significant influence over the outcome of corporate actions requiring stockholder approval.

Approximately 26.5% of our outstanding common stock is held by a group of 17 shareholders (the “Low-Beer Managed Accounts”) who invested in our December 2011 placement of 11,250,000 shares of common stock together with warrants to purchase up to 11,250,00 shares of common stock. The warrants are exercisable for a period of five years and exercisable at a price of \$0.22 per share. The warrants further provide that if, for a twenty consecutive trading day period, the average of the closing price quoted on the NYSE Amex is greater than or equal to \$0.44 per share, with at least an average of 10,000 shares traded per day, then, on the 10th calendar day following written notice from the Company, any outstanding warrants will be deemed automatically exercised pursuant to the cashless/net exercise provisions under the warrants. Accordingly, the Low-Beer Managed Accounts, should they choose to do so, may be able to significantly influence the outcome of any corporate transaction or other matter submitted to our stockholders for approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transaction, and such group of investors could delay or prevent a change of control of our company, even if such a change of control would benefit our other stockholders. The interests of the Low-Beer Managed Accounts may differ from the interests of our other stockholders.

Our common stock is subject to delisting from the NYSE Amex

The NYSE Amex, where our common stock trades, has established standards for continued listing of a security on the NYSE Amex. On April 17, 2012, the NYSE Amex notified the Company that it is not in compliance with one of the NYSE Amex continued listing standards as set forth in Part 10 of the Company Guide, and the Company has therefore become subject to the procedures and requirements of Section 1009 of the Company Guide. Specifically, the Company is not in compliance with Section 1003(a)(iii) with stockholders’ equity of less than \$6,000,000 and losses from continuing operations and/or net losses in five consecutive fiscal years. The Company has been afforded the opportunity to submit a plan of compliance to the NYSE Amex by May 17, 2012 addressing how the Company intends to regain compliance with the continued listing standards of the Company Guide within the Plan Period. The Company is taking steps to prepare and submit such a plan to the NYSE Amex on or before May 17, 2012. Per the

Notice, if the Company does not submit such a plan or the plan is not accepted by the NYSE Amex, the Company will become subject to delisting proceedings. Furthermore, if the plan is accepted but the Company is not in compliance with the continued listing standards of the Company Guide by October 15, 2013 or if the Company is not making progress consistent with the plan during the Plan Period, the NYSE Amex staff will initiate delisting procedures as appropriate. In such event, the Company may appeal an NYSE Amex staff determination to initiate delisting proceedings in accordance with Section 1010 and Part 12 of the Company Guide.

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Additionally, the standards for delisting from the stock market include, among other things, common stock selling for a substantial period of time at a low price per share. Our common stock has continuously traded below \$1.00 since May 2011. While we have not received any communications to date from the NYSE Amex concerning the selling price of our common shares, there can be no assurance that the NYSE Amex will not take action to delist our common stock from the exchange due to the low selling price of the shares. If that were to occur, we would consider effecting a reverse split of our common stock in order to raise our share price to a level satisfactory to the NYSE Amex. If our common stock were to be delisted from the NYSE Amex, it would materially adversely affect the price and liquidity of our common stock, and our ability to raise funds from the sale of equity in the future.

The price of our common stock may be volatile, which may cause investment losses for our stockholders

The price and trading volume of our common stock have historically been volatile. For example, in the twelve months through April 24, 2012, the closing market price of our common stock ranged from \$0.152 per share to \$1.039 per share, and the daily trading volume varied from approximately 600 shares to 1,198,599 shares. Our agreements with Lincoln Park to sell up to \$3,400,000 and \$6,600,000 of shares of our common stock to Lincoln Park could increase the volatility of the price of our common stock for the duration of such agreements. Other factors that could contribute to the continued volatility of the market price of our common stock include:

- actual or anticipated fluctuations in our results of operations;
- the introduction of new products or services, or product or service enhancements by us or our competitors;
- developments with respect to our or our competitors' intellectual property rights or regulatory approvals or denials;
 - announcements of significant acquisitions or other agreements by us or our competitors;
- the sale by us of our common or preferred stock or other securities, or the anticipation of sales of such securities;
 - sales or anticipated sales of our common stock by our insiders (management and directors);
 - the trading volume of our common stock, particularly if such volume is light;
 - conditions and trends in our industry;
 - changes in our pricing policies or the pricing policies of our competitors;
- changes in the estimation of the future size and growth of our markets; and, among other factors,
 - general economic conditions.

Risks Related to Our Business and Industry

Our history of operating losses and our expectation of continuing losses may hurt our ability to reach profitability or continue operations.

We have experienced significant operating losses since our inception. Our net loss was \$6,984,000 for the fiscal year ended December 31, 2011 and our accumulated deficit was \$151,112,000 as of December 31, 2011. It is likely that we will continue to incur substantial net operating losses for the foreseeable future, which may adversely affect our ability to continue operations. Our annual report on Form 10-K for the fiscal year ended December 31, 2011 included an audit opinion containing a going concern qualification. To achieve profitable operations, we must successfully develop and market our products at higher margins. We may not be able to generate sufficient product revenue to become profitable. Even if we do achieve profitability, we may not be able to sustain or increase our profitability on a quarterly or yearly basis.

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We are dependent on access to capital markets in order to fund continued operations of the Company.

We do not currently have adequate internal liquidity to fund the Company's operations on an ongoing basis. We will need to continue to look for partnering opportunities and other external sources of liquidity, including the public and private financial markets and strategic partners. We may not be able to obtain financing arrangements in amounts or on terms acceptable to us in the future. In the event we are unable to obtain additional financing when needed, and without substantial reductions in development programs and strategic initiatives, we do not expect that our cash and cash equivalents and short-term investments will be sufficient to fund our operating and capital needs for the twelve months following December 31, 2011.

Funding from our equity lines of credit may be limited or be insufficient to fund our operations or to implement our strategy.

Under our purchase agreements with Lincoln Park, we may direct Lincoln Park to purchase up to \$3,400,000 of shares of common stock over a 36 month period, and, upon effectiveness of a registration statement for resale of the shares and subject to other conditions, we also may direct Lincoln Park to purchase up to \$6,600,000 of our shares of common stock over a 36 month period. The amounts available for purchase is limited under each purchase agreement. The extent to which we rely on Lincoln Park as a source of funding will depend on a number of factors including, the amount, if any, of additional working capital needed, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. If we are unable to sell enough of our products to finance our working capital requirements and if sufficient funding from Lincoln Park were to prove unavailable or prohibitively dilutive, we would need to secure another source of funding. Even if we sell all \$10,000,000 million under the aggregate purchase agreements to Lincoln Park, there can be no assurance this would be sufficient to support our operations or implement our growth plans in all cases.

Because we depend upon sales to a limited number of customers, our revenues will be reduced if we lose a major customer

Our revenue is dependent on significant orders from a limited number of customers. We typically enter into supply agreements with major customers establishing product and price standards for future periods. Subsequent events may change the needs of the customer, requiring us to make corresponding adjustments. In the fiscal year ended December 31, 2011, Smith accounted for 52% of our total revenues and our four largest customers, inclusive of Smith, comprised 94% of revenues. We believe that revenues from major customers will continue to represent a significant portion of our revenues. This customer concentration increases the risk of quarterly fluctuations in our revenues and operating results. The loss or reduction of business from one or a combination of our significant customers could adversely affect our revenues, financial condition and results of operations. Moreover, our success will depend in part upon our ability to obtain orders from new customers, as well as the financial condition and success of our customers and general economic conditions.

Our future growth depends on consumers' willingness to accept hybrid and electric vehicles

Our growth is highly dependent upon the acceptance by consumers of, and we are subject to an elevated risk of any reduced demand for, alternative fuel vehicles in general and electric vehicles in particular. If the market for electric vehicles does not develop as we expect or develops more slowly than we expect, our business, prospects, financial condition and operating results will be materially and adversely affected. The market for alternative fuel vehicles is relatively new, rapidly evolving, characterized by rapidly evolving and changing technologies, price competition, additional competitors and changing consumer demands or behaviors. Factors that may influence the acceptance of alternative fuel vehicles include:

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- perceptions about alternative fuel vehicles safety (in particular with respect to lithium-ion battery packs), design, performance and cost, especially if adverse events or accidents occur that are linked to the quality or safety of alternative fuel vehicles;
 - volatility in the cost of oil and gasoline;
- consumer's perceptions of the dependency of the United States on oil from unstable or hostile countries;
 - improvements in fuel of the internal combustion engine;
 - the environmental consciousness of consumers;
 - government regulation;
 - macroeconomics.

We extend credit to our customers, which exposes us to credit risk

Most of our outstanding accounts receivable are from a limited number of large customers. At December 31, 2011, the two highest outstanding accounts receivable balances totaled approximately \$780,000 which represents 91% of our gross accounts receivable. If we fail to monitor and manage effectively the resulting credit risk and a material portion of our accounts receivable is not paid in a timely manner or becomes uncollectible, our business would be significantly harmed, and we could incur a significant loss associated with any outstanding accounts receivable.

Our business is affected by current economic and financial market conditions in the markets we serve

Current global economic and financial markets conditions, including severe disruptions in the credit markets and the significant and potentially prolonged global economic recession, may materially and adversely affect our results of operations and financial condition. We are particularly impacted by any global automotive slowdown and its effects on original equipment manufacturer inventory levels, production schedules, support for our products and decreased ability to accurately forecast future product demand.

The nature of our industry is dependent on technological advancement and is highly competitive

The mobile power market, including electric vehicle and hybrid electric vehicles, continue to be subject to rapid technological changes. Most of the major domestic and foreign automobile manufacturers: (1) have already produced electric and hybrid vehicles, (2) have developed improved electric storage, propulsion and control systems, and/or (3) are now entering or have entered into production, while continuing to improve technology or incorporate newer technology. Various companies are also developing improved electric storage, propulsion and control systems.

Our industry is affected by political and legislative changes

In recent years there has been significant legislation enacted in the United States and abroad to reduce or eliminate automobile pollution, promote or mandate the use of vehicles with no tailpipe emissions ("zero emission vehicles") or reduced tailpipe emissions ("low emission vehicles"). Although states such as California have enacted such legislation, we cannot assure you that there will not be further legislation enacted changing current requirements or that current legislation or state mandates will not be repealed or amended, or that a different form of zero emission or low emission vehicle will not be invented, developed and produced, and achieve greater market acceptance than electric or hybrid electric vehicles.

We may be unable to effectively compete with other companies who have significantly greater resources than we have

Many of our competitors, in the automotive, electronic, and other industries, have substantially greater financial, personnel, and other resources than we do. Because of their greater resources, some of our competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements, or to devote greater

resources to the promotion and sales of their products than we can.

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We may be exposed to product liability or tort claims if our products fail, which could adversely impact our results of operations

A malfunction or the inadequate design of our products could result in product liability or other tort claims. Any liability for damages resulting from malfunctions could be substantial and could materially adversely affect our business and results of operations. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products.

We are highly dependent on a few key personnel and will need to retain and attract such personnel in a labor competitive market

Our success is largely dependent on the performance of our key management and technical personnel, the loss of one or more of whom could adversely affect our business. Additionally, in order to successfully implement our anticipated growth, we will be dependent on our ability to hire additional qualified personnel. There can be no assurance that we will be able to retain or hire other necessary personnel. We do not maintain key man life insurance on any of our key personnel. We believe that our future success will depend in part upon our continued ability to attract, retain, and motivate additional highly skilled personnel in an increasingly competitive market.

We are highly dependent on a few vendors for key system components made to our engineering specifications and disruption of vendor supply could adversely impact our results of operations.

Our product specifications often involve upfront investment in tooling and machinery, which result in our commitment to a limited number of high quality vendors that can meet our manufacturing standards. Any disruption to our supply of key components from the suppliers would have an adverse impact on our business and results of operations.

There are minimal barriers to entry in our market

We presently license or own only certain proprietary technology, and therefore have created little or no barrier to entry for competitors other than the time and significant expense required to assemble and develop similar production and design capabilities. Our competitors may enter into exclusive arrangements with our current or potential suppliers, thereby giving them a competitive edge which we may not be able to overcome, and which may exclude us from similar relationships.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions intended to identify forward-looking statements. While we believe that we have a reasonable basis for each forward-looking statement, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. We discuss many of these risks, uncertainties and other factors in greater detail under the heading “Risk Factors” contained in this prospectus supplement. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. You should read carefully both this prospectus supplement and the accompanying prospectus, together with the information incorporated herein by reference as described under the heading “Where You Can Find More Information” in this prospectus supplement and the accompanying prospectus, completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify all of our forward-looking statements by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

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DILUTION

Our net tangible book value as of December 31, 2011 was approximately \$5,300,000 or \$0.12 per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of December 31, 2011.

After giving effect to our sale of 14,782,609 shares of our common stock in this offering at an assumed offering price of \$0.23 per share (the last reported sale price of our common stock on April 23, 2012) not including the shares to be issued to Lincoln Park at no cost as a fee for its commitment to purchase shares of our common stock, our as adjusted net tangible book value as of December 31, 2011 would have been approximately \$8,700,000, or \$0.15 per share. This represents an immediate increase in net tangible book value of \$0.03 per share to existing stockholders and immediate dilution in net tangible book value of \$0.08 per share to new investors participating in this offering at the offering price. The following table illustrates this dilution on a per share basis:

| | | |
|---|--------|--------|
| Assumed offering price per share | | \$0.23 |
| Net tangible book value per share as of December 31, 2011 | \$0.12 | |
| Increase per share attributable to new investors | \$0.03 | |
| As adjusted net tangible book value per share after this offering | | \$0.15 |
| Dilution per share to new investors | | \$0.08 |

The above discussion and table excludes any shares that we may issue pursuant to the \$6,600,000 Purchase Agreement with Lincoln Park.

The above discussion and table are based on 42,765,223 shares of common stock issued and outstanding as of April 24, 2012 and excludes:

- 83,211 shares of our common stock issuable upon exercise of our Series A and Series B preferred stock outstanding on April 24, 2012;
- 11,250,000 shares of our common stock issuable upon conversion of warrants outstanding on April 24, 2012, exercisable at a price of \$0.22 ;
- 2,464,092 shares of our common stock issuable upon exercise of options outstanding as of April 24, 2012, of which approximately 1,877,642 shares are exercisable; and
- 494,390 shares of our common stock available for future grants under our stock option plan as of April 24, 2012.

To the extent that outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the securities offered pursuant to this prospectus will be up to \$3,340,000 over an approximately 36-month period, assuming that we sell all of the shares offered under this prospectus supplement and taking into account shares issued to Lincoln Park at no cost to Lincoln Park as consideration for its commitment to purchase the other shares of our common stock offered pursuant to this prospectus supplement.

We expect to use the net proceeds from this offering for working capital and general corporate purposes. We do not expect to use the net proceeds from the offering for the satisfaction of any portion of the Company's debt (other than payment of trade payables in the ordinary course of the Company's business and prior practices, including payment of \$25,000 due to an unaffiliated third party for financial advisory services not in connection with this offering).

The amounts and timing of our actual expenditures will depend on numerous factors, including the status of our product sales and marketing efforts, the amount of proceeds actually raised in this offering, and the amount of cash generated through our existing strategic collaborations and any additional strategic collaborations into which we may enter. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering.

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering, we are offering a maximum of \$3,602,000 in aggregate value of shares of our common stock, of which (i) 281,030 Initial Commitment Shares of our common stock are to be issued to Lincoln Park on the date of this prospectus supplement, at no cost to Lincoln Park, as consideration for its commitment to purchase our common stock pursuant to the \$3,400,000 Purchase Agreement, (ii) 286,651 Additional Commitment Shares of our common stock are to be issued to Lincoln Park, at no cost to Lincoln Park, as consideration for its commitment to purchase our shares of common stock upon such purchase in an amount equal to the product of (x) 286,651 and (y) a fraction, the numerator of which is the purchase amount for the relevant shares purchased by the Lincoln Park and the denominator of which is \$3,400,000, (iii) 1,250,000 shares of our common stock to be sold to Lincoln Park at a price per share of \$0.20 for an aggregate amount of \$250,000, and (iv) up to \$3,150,000 of shares of our common stock, no par value per share, subject to certain limitations, which may be sold to Lincoln Park, from time to time and at our discretion over a 36-month period commencing on the date of this prospectus supplement, (i) in Regular Purchases at the Regular Purchase Price; provided that in no event will such shares be sold to Lincoln Park at a price of less than \$0.13 per share, and/or (ii) in Accelerated Purchases at the Accelerated Purchase Price; provided the closing price of our common stock is not less than \$0.20 on the purchase date and provided further that in no event will shares be sold at a price of less than \$0.13 per share.

The material terms and provisions of our common stock and each other class of our securities that may qualify or limit our common stock are described under the captions "Description of Common Stock," "Description of Warrants," "Description of Debt Securities," "Description of Units" starting on page 5 of the accompanying prospectus. As of April 24, 2012, 42,765,223 shares of our common stock were outstanding.

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PLAN OF DISTRIBUTION

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to \$3,602,000 in shares of our common stock that will be issued by us directly to Lincoln Park Capital Fund, LLC under the \$3,400,000 Purchase Agreement. This prospectus supplement and the accompanying prospectus also cover the resale of these shares by Lincoln Park to the public.

Under the terms of the \$3,400,000 Purchase Agreement, upon the satisfaction of all of the conditions to our right to commence sales under the \$3,400,000 Purchase Agreement, which we refer to as the Commencement, Lincoln Park will initially purchase 1,250,000 shares of our common stock at a price per share of \$0.20 for an aggregate amount of \$250,000. Thereafter, beginning five business days after the date of the Commencement, we may, from time to time and at our sole discretion but no more frequently than every two business days during the 36-month period commencing on the date of the Commencement, direct Lincoln Park to purchase up to an aggregate amount of \$3,150,000 in shares of our common stock subject to certain limitations at the Regular Purchase Price or Accelerated Purchase Price as described in this prospectus. There is no upper limit on the price per share that Lincoln Park must pay for our common stock under the \$3,400,000 Purchase Agreement, but in no event will shares be sold to Lincoln Park under such agreement at a price of less than \$0.13 per share. Additionally, Lincoln Park will not purchase shares at the Accelerated Purchase Price if the closing price of our common stock on the NYSE Amex is less than \$0.20 on the purchase date.

As of February 28, 2012, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$10.8 million, based on 42,765,223 shares of outstanding common stock, of which 27,736,099 shares were held by non-affiliates, and a per share price of \$0.39 based on the closing sale price of our common stock on such date.

The \$3,400,000 Purchase Agreement limits our sales of shares of common stock to Lincoln Park to the lesser of: (a) the maximum number of shares of our common stock that we may issue without breaching our obligations under applicable rules of the NYSE Amex or obtaining stockholder approval under such rules, and (b) the maximum number of shares of our common stock that we may issue without exceeding the limitations set forth in General Instruction I.B.6. of Form S-3 and the interpretive guidance of the SEC applicable to these transactions (such lesser number of shares is referred to as the Maximum Share Cap). As of February 28, 2012, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$10.8 million, based on 42,765,223 shares of outstanding common stock, of which 27,736,099 shares were held by non-affiliates, and a per share price of \$0.39 based on the closing sale price of our common stock on such date. During the period of 12 calendar months immediately prior to, and including, the date of this prospectus supplement, we have not sold any shares of our common stock pursuant to General Instruction I.B.6. of Form S-3. Accordingly, as of the date of this prospectus supplement, we are able sell a maximum of approximately \$3.605 million of shares of our common stock pursuant to General Instruction I.B.6. of Form S-3 and the interpretive guidance of the SEC applicable to these transactions.

It is anticipated that shares registered in this offering will be sold over a period of up to 36 months. The sale by Lincoln Park of a significant amount of shares registered in this offering at any given time could cause the market price of our common stock to decline and to be highly volatile. Lincoln Park may ultimately purchase all, some or none of the shares of common stock offered hereby. After it has acquired such shares, it may sell all, some or none of such shares. Therefore, sales by us to Lincoln Park of the shares registered in this offering may result in substantial dilution to the interests of other holders of our common stock. However, we have the right to control the timing and amount of any sales of our shares to Lincoln Park.

The number of shares ultimately offered for sale by Lincoln Park under this prospectus supplement is dependent upon the number of shares purchased by Lincoln Park under the \$3,400,000 Purchase Agreement. The following table sets

forth the amount of proceeds we would receive from Lincoln Park from the sale of shares that are registered in this offering at varying purchase prices (without accounting for certain fees and expenses):

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| Assumed Average Purchase Price | | Number of Registered Shares to be Issued if Full Purchase (1) | | Percentage of Outstanding Shares After Giving Effect to the Issuance to Lincoln Park (2) | Proceeds from the Sale of Shares to Lincoln Park Under the \$3,400,000 Purchase Agreement |
|---|-----|---|-----|---|--|
| \$0.13 | (3) | 26,153,846 | (6) | 37.64 | \$3,400,000 |
| \$0.20 | (4) | 17,000,000 | (6) | 28.18 | \$3,400,000 |
| \$0.23 | (5) | 14,782,609 | (6) | 25.43 | \$3,400,000 |
| \$1.00 | | 3,400,000 | | 7.28 | \$3,400,000 |
| \$2.00 | | 1,700,000 | | 3.78 | \$3,400,000 |

(1) Excludes the 567,681 shares to be issued to Lincoln Park as commitment shares.

(2) The denominator is based on 42,765,223 shares outstanding as of April 24, 2012, adjusted to include the 281,030 shares to be issued to Lincoln Park as commitment shares in connection with this offering and the number of shares set forth in the adjacent column which we would have sold to Lincoln Park and any related additional shares which we would have issued prorata, but excluding the 556,440 commitment shares that may be issued to Lincoln Park in connection with the \$6,600,000 Purchase Agreement. The numerator is based on the number of shares issuable under the \$3,400,000 Purchase Agreement at the corresponding assumed purchase price set forth in the adjacent column. The number of shares in such column does not include shares that may be issued to Lincoln Park which are not registered in this offering.

(3) Under the \$3,400,000 Purchase Agreement, we may not sell and Lincoln Park may not purchase any shares in the event the purchase price of such shares is below \$0.13.

(4) Under the \$3,400,000 Purchase Agreement, we may not sell and Lincoln Park may not purchase any shares at the Accelerated Purchase Price in the event the closing price of our common stock on the NYSE Amex is less than \$0.20 on the purchase date.

(5) The closing sale price of our shares on April 23, 2012.

(6) If we seek to issue shares, including shares from other transactions but not included in this offering that may be aggregated with this transaction under the applicable rules of NYSE Amex, in excess of 8,500,000, or 19.99% of the total common stock outstanding as of the date of the \$3,400,000 Purchase Agreement, we may be required to seek shareholder approval in order to be in compliance with the NYSE Amex rules.

Events of default under the \$3,400,000 Purchase Agreement include the following:

- the effectiveness of the registration statement, of which this prospectus supplement and accompanying prospectus are a part, lapses for any reason (including, without limitation, the issuance of a stop order), or the prospectus supplement and accompanying prospectus are unavailable for sale by us or the resale by Lincoln Park of our common stock offered hereby, and such lapse or unavailability continues for a period of ten (10) consecutive business days or for more than an aggregate of thirty (30) business days in any 365-day period;

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- suspension by our principal market of our common stock from trading for a period of ten (10) consecutive business days;
- the de-listing of our common stock from the NYSE Amex, provided our common stock is not immediately thereafter trading on the New York Stock Exchange, The NASDAQ Capital Market, The NASDAQ Global Market or The NASDAQ Global Select Market;
- the transfer agent's failure for five (5) business days to issue to Lincoln Park shares of our common stock which Lincoln Park is entitled to receive under the \$3,400,000 Purchase Agreement;
- any breach of the representations or warranties or covenants contained in the \$3,400,000 Purchase Agreement or any related agreements which has or which has a material adverse effect on us subject to a cure period of five (5) business days; or
 - any participation or threatened participation in insolvency or bankruptcy proceedings by or against us.

Lincoln Park does not have the right to terminate the \$3,400,000 Purchase Agreement upon any of the events of default set forth above. During an event of default, all of which are outside the control of Lincoln Park, shares of our common stock cannot be sold by us or purchased by Lincoln Park under the terms of the \$3,400,000 Purchase Agreement.

We may suspend the sale of shares to Lincoln Park pursuant to this prospectus supplement for certain periods of time for certain reasons, including if this prospectus supplement is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all shares offered by this prospectus supplement have been sold to Lincoln Park or, if earlier, the expiration or termination of the \$3,400,000 Purchase Agreement. We have the right to terminate the \$3,400,000 Purchase Agreement at any time, at no cost to us. In the event of bankruptcy proceedings by or against us, the \$3,400,000 Purchase Agreement will automatically terminate without action of any party.

Pursuant to the \$3,400,000 Purchase Agreement, we will issue to Lincoln Park, as consideration for its commitment to purchase our common stock under such agreement, 567,681 shares of our common stock, all of which are covered by this prospectus supplement.

As of the date of the \$3,400,000 Purchase Agreement, Lincoln Park Capital Fund, LLC, did not beneficially own any shares of our common stock. Josh Scheinfeld and Jonathan Cope, the Managing Members of Lincoln Park Capital, LLC, the manager of Lincoln Park Capital Fund, LLC, are deemed to be beneficial owners of all of the shares of common stock owned by Lincoln Park Capital Fund, LLC. Messrs. Cope and Scheinfeld have shared voting and investment power over the shares being offered under the prospectus supplement filed with the SEC in connection with the transactions contemplated under the \$3,400,000 Purchase Agreement. Lincoln Park Capital, LLC is not a licensed broker dealer or an affiliate of a licensed broker dealer.

Lincoln Park is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act. Lincoln Park has informed us that it will use an unaffiliated broker-dealer to effectuate all sales, if any, of the common stock that it may purchase from us pursuant to the \$3,400,000 Purchase Agreement. Such sales will be made on the NYSE Amex at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Lincoln Park has informed us that each such broker-dealer will receive commissions from Lincoln Park that will not exceed customary brokerage commissions. In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or

FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus supplement.

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We know of no existing arrangements between Lincoln Park, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus supplement. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any other required information.

We will pay the expenses incident to the registration, offering, and sale of the shares to Lincoln Park. We have agreed to indemnify Lincoln Park and certain other persons against certain liabilities in connection with the offering of shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Lincoln Park has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Lincoln Park specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Lincoln Park represented to us that at no time prior to the \$3,400,000 Purchase Agreement has Lincoln Park or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our common stock or any hedging transaction, which establishes a net short position with respect to the Company's common stock. Lincoln Park agreed that during the term of the \$3,400,000 Purchase Agreement, neither it, nor its agents, representatives or affiliates will not enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised Lincoln Park that it is required to comply with Regulation M promulgated under the Exchange Act, to the extent Regulation M is applicable to these transactions. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered by this prospectus supplement.

This offering will terminate on the date all the shares offered by this prospectus supplement have been resold by Lincoln Park.

The transfer agent for our common stock is Computershare Trust Company, N.A. Its address is 350 Indiana Street, Suite 750, Golden, Colorado 80401, and its telephone number is (800) 962-4284.

Our common stock is listed on the NYSE Amex under the symbol "ENA".

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement will be passed upon for us by Reed Smith LLP, San Francisco, California.

EXPERTS

The financial statements incorporated by reference in this prospectus supplement have been so incorporated by reference in reliance upon the reports of PMB Helin Donovan, LLP, independent registered public accounting firm, given on their authority as experts in accounting and auditing.

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WHERE YOU CAN FIND MORE INFORMATION

We electronically file annual, quarterly and special reports, proxy and information statements and other information with the SEC. The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>. Our website address is www.enovasystems.com. Information contained in, or accessible through, our website is not a part of this prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. We incorporate by reference the following information or documents that we have filed with the SEC (Commission File No. 001-14468):

- our annual report on Form 10-K for the fiscal year ended December 31, 2011, filed with the SEC on March 29, 2012;
- our current reports on Form 8-K filed with the SEC on January 6, 2012, January 26, 2012, April 20, 2012, and April 25, 2012;
- the description of our common stock and our preferred stock contained in our Registration Statement on Form 8-A filed with the SEC on August 28, 2006, including any amendment or report filed for the purpose of updating such description.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later-filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to:

Chief Financial Officer
Enova Systems, Inc.
1560 West 190th Street
Torrance, CA 90501

PROSPECTUS

ENOVA SYSTEMS, INC.

\$50,000,000

Common Stock
Warrants
Debt Securities
Units

We may from time to time in one or more offerings, offer and sell one or any combination of the securities we describe in this prospectus, either individually or as units comprised of one or more of the other securities.

Each time we sell our securities, we will provide the specific type, amount, and price offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement carefully before you invest in any securities. This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement.

We may sell our securities through agents we select or through underwriters and dealers we select. If we use agents, underwriters or dealers, we will name them and describe their compensation in a prospectus supplement.

Our common stock is quoted on the NYSE Amex under the symbol "ENA." On August 23, 2011, the last reported sales price of our common stock, as reported on the NYSE Amex, was \$0.59 per share.

As of July 8, 2011, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$24,195,346, which was calculated based on 27,810,743 shares of outstanding common stock held by non-affiliates and on a price per share of \$0.87, the closing price of our common stock on July 8, 2011. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding more than one-third of our market value in any 12-month period so long as our market value remains below \$75 million. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

Investing in our securities involves certain risks. See "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2010, our Quarterly Report on Form 10-Q for the period ended June 30, 2011, as well as our subsequently filed periodic and current reports, which have been filed with the Securities and Exchange Commission and are incorporated by reference into this prospectus. You should read the entire prospectus carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration or continuous offering process.

You should read this prospectus and the information and documents incorporated by reference carefully. Such documents contain important information you should consider when making your investment decision. See “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus.

You should rely only on the information provided in this prospectus or documents incorporated by reference into this prospectus. We have not authorized anyone to provide you with different information. This prospectus covers offers and sales of our securities only in jurisdictions in which such offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our securities. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

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OUR COMPANY

The following is only a summary and therefore does not contain all of the information you should consider before investing in our securities. We urge you to read this entire prospectus, including the matters discussed under “Risk Factors” in this prospectus and the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC.

Enova believes it is a leader in the development, design and production of proprietary, power train systems and related components for electric and hybrid electric buses and medium and heavy duty commercial vehicles. Electric drive systems are comprised of an electric motor, an electronics control unit and a gear unit which power a vehicle. Hybrid electric systems, which are similar to pure electric drive systems, contain an internal combustion engine in addition to the electric motor, and may eliminate external recharging of the battery system. A hydrogen fuel cell based system is similar to a hybrid system, except that instead of an internal combustion engine, a fuel cell is utilized as the power source. A fuel cell is a system which combines hydrogen and oxygen in a chemical process to produce electricity.

A fundamental element of our strategy is to develop and produce advanced proprietary software and hardware for applications in these alternative power markets. Our focus is powertrain systems including digital power conversion, power management and system integration, focusing chiefly on vehicle power generation.

Specifically, we develop, design and produce drive systems and related components for electric, hybrid electric and fuel cell powered vehicles in both the new and retrofit markets. We also perform internal research and development and funded third party research and development to augment our product development and support our customers.

Our product development strategy is to design and introduce to market successively advanced products, each based on our core technical competencies. In each of our product/market segments, we provide products and services to leverage our core competencies in digital power management, power conversion and system integration. We believe that the underlying technical requirements shared among the market segments will allow us to more quickly transition from one emerging market to the next, with the goal of capturing early market share.

Our primary market focus centers on aligning ourselves with key customers and integrating with original equipment manufacturers in our target markets we believe that alliances will result in the latest technology being implemented and customer requirements being met, with an optimized level of additional time and expense. As we penetrate new market areas, we are continually refining both our market strategy and our product line to maintain our leading edge in power management and conversion systems for vehicle applications.

Our company, previously known as U.S. Electricar, Inc., a California corporation, was incorporated on July 30, 1976. Our address is 1560 West 190th Street, Torrance, California 90501 and our telephone number is 310-527-2800. Our website address is www.enovasystems.com. Information on our website is not incorporated by reference into this prospectus and does not constitute part of this prospectus.

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THE OFFERING

| | |
|---|--|
| Securities registered hereunder: | Common Stock, Warrants, Debt Securities, Units |
| Proposed maximum aggregate offering price: | \$50,000,000 (subject to any applicable limit under General Instruction I.B.6 of Form S-3) |
| Common Stock outstanding: | 31,515,223 shares |
| NYSE Amex symbol for Common Stock: | ENA |
| Alternative Investment Market (London Stock Exchange) symbols for Common Stock: | ENV and ENV5 |
| Use of Proceeds: | We intend to use the net proceeds of any offering as set forth in the applicable prospectus supplement. |
| Risk Factors: | See "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2010, our Quarterly Report on Form 10-Q for the period ended June 30, 2011, as well as our subsequently filed periodic and current reports, for a discussion of factors to consider before investing in shares of our securities. |

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RISK FACTORS

Investment in our securities involves risks. Prior to making a decision about investing in our securities, you should consider carefully the risk factors, together with all of the other information contained or incorporated by reference in this prospectus and any prospectus supplement, including any additional specific risks described in the section entitled “Risk Factors” contained in any supplements to this prospectus and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, our Quarterly Report on Form 10-Q for the period ended June 30, 2011, as well as any amendments or additions thereto reflected in subsequent filings with the SEC. Each of these risk factors could materially and adversely affect our business, financial condition, results of operations, and liquidity.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING INFORMATION

Information in and incorporated by reference into this prospectus contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 and the safe harbor provided by Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements often can be, but are not always, identified by the use of words such as “assume,” “expect,” “intend,” “plan,” “project,” “believe,” “estimate,” “predict,” “anticipate,” “may,” “might,” “could,” “goal,” “potential” and similar expressions. Such forward-looking statements, including, without limitation, those relating to the future business prospects, revenues and income of Enova, wherever they occur, are necessarily estimates reflecting the best judgment of our senior management on the date on which they were made, or if no date is stated, as of the date of this prospectus. Forward-looking statements are subject to risks, uncertainties and assumptions, including those described in the section entitled “Risk Factors” and elsewhere in the documents incorporated by reference into this prospectus, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2010, our Quarterly Report on Form 10-Q for the period ended June 30, 2011, and our subsequent SEC filings.

Because actual results or outcomes could differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any such forward-looking statements. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or any other reason. All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this prospectus may not occur.

USE OF PROCEEDS

We intend to use the net proceeds of any offering as set forth in the applicable prospectus supplement. Except as may be otherwise described in a prospectus supplement, we currently anticipate using any net proceeds to us for general corporate purposes, which may include higher production volumes of our power train systems and may also include working capital, research and development expenses, general and administrative expenses, and capital expenditures. The amounts and timing of our actual expenditures for each purpose may vary significantly depending upon numerous factors, including the actual amount of proceeds we receive, the status of our research and product development efforts, regulatory approvals, competition and economic or other conditions.

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DESCRIPTION OF COMMON STOCK

Under our Restated and Amended Articles of Incorporation, we are currently authorized to issue 750,000,000 shares of common stock, no par value. As of July 31, 2011, we had 31,515,223 shares of common stock outstanding.

Holders of our common stock are entitled to one vote for each share of common stock held of record on all matters to be voted on by holders, except as otherwise provided by law or in any preferred stock designation. Our bylaws specify that, except as otherwise required by law or our charter, the presence in person or by proxy of holders of a majority of the shares entitled to vote at a meeting of stockholders will be necessary, and will constitute a quorum, for the transaction of business at such meeting.

Every holder of common stock has the right to cumulate the holder's votes in connection with the election of our directors. Under cumulative voting, each holder may cast for a single candidate, or distribute among the candidates as such holder chooses, a number of votes equal to the number of candidates multiplied by the number of votes to which holders' shares are entitled. Cumulative voting will apply only to those candidates whose names have been placed in nomination prior to voting. No holder will be entitled to cumulate votes unless a holder has given notice at the meeting, prior to the voting, of such holder's intention to cumulate the holder's votes. If any one holder gives such notice, all holders eligible to vote may cumulate their votes for candidates in nomination, except to the extent that if a holder withholds votes from the nominees.

Holders of our common stock are entitled to receive dividends when, as and if declared by our board of directors out of funds legally available therefor. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share in all assets remaining which are available for distribution to them after payment of liabilities and after provision has been made for each class of stock, if any, having preference over the common stock.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock or our debt securities. We may issue warrants independently or together with other securities. Warrants sold with other securities may be attached to or separate from the other securities. We will issue warrants under one or more warrant agreements between us and a warrant agent that we will name in the prospectus supplement.

The prospectus supplement relating to any warrants we offer will include specific terms relating to the offering. These terms will include some or all of the following:

- the title of the warrants;
- the aggregate number of warrants offered;
- the designation, number and terms of the shares of common stock or other securities purchasable upon exercise of the warrants and procedures by which those numbers may be adjusted;
- the exercise price of the warrants;
- the dates or periods during which the warrants are exercisable;
- the designation and terms of any securities with which the warrants are issued;

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- if the warrants are issued as a unit with another security, the date on and after which the warrants and the other security will be separately transferable;
- if the exercise price is not payable in U.S. dollars, the foreign currency, currency unit or composite currency in which the exercise price is denominated;
- any minimum or maximum amount of warrants that may be exercised at any one time;
- any terms relating to the modification of the warrants;
- any terms, procedures and limitations relating to the transferability, exchange or exercise of the warrants; and
- any other specific terms of the warrants.

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DESCRIPTION OF DEBT SECURITIES

We may issue debt securities under an indenture between us and a U.S. banking institution, as the indenture trustee. Each indenture will be subject to, and governed by, the Trust Indenture Act of 1939, as amended, and we may supplement the indenture from time to time after we execute them.

This prospectus summarizes the material provisions of the indenture and the debt securities that we may issue under an indenture. This summary may not describe all of the provisions of the indenture or of any of the debt securities that might be important to you. For additional information, you should carefully read the forms of indenture that are incorporated by reference as an exhibit to the registration statement of which this prospectus forms a part.

When we offer to sell a particular series of debt securities, we will describe the specific terms of those debt securities in a supplement to this prospectus. We will also indicate in the supplement whether the general terms in this prospectus apply to a particular series of debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, you should carefully read this prospectus and the applicable supplement.

Terms

The prospectus supplement will describe the debt securities and the price or prices at which we will offer the debt securities. The description will include:

- the title and form of the debt securities;
- any limit on the aggregate principal amount of the debt securities or the series of which they are a part;
- the person to whom any interest on a debt security of the series will be paid;
- the date or dates on which we must repay the principal;
- the rate or rates at which the debt securities will bear interest;
- the date or dates from which interest will accrue, and the dates on which we must pay interest;
- the place or places where we must pay the principal and any premium or interest on the debt securities;
- the terms and conditions on which we may redeem any debt security, if at all;
- any obligation to redeem or purchase any debt securities, and the terms and conditions on which we must do so;
- the denominations in which we may issue the debt securities;
- the manner in which we will determine the amount of principal of or any premium or interest on the debt securities;
- the currency in which we will pay the principal of and any premium or interest on the debt securities;

- the principal amount of the debt securities that we will pay upon declaration of acceleration of their maturity;
- the amount that will be deemed to be the principal amount for any purpose, including the principal amount that will be due and payable upon any maturity or that will be deemed to be outstanding as of any date;

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- if applicable, that the debt securities are defeasible and the terms of such defeasance;
- if applicable, the terms of any right to convert debt securities into, or exchange debt securities for, shares of our debt securities, common stock, or other securities or property;
- whether we will issue the debt securities in the form of one or more global securities and, if so, the respective depositaries for the global securities and the terms of the global securities;
- the subordination provisions that will apply to any subordinated debt securities;
- any addition to or change in the events of default applicable to the debt securities and any change in the right of the trustee or the holders to declare the principal amount of any of the debt securities due and payable;
- any addition to or change in the covenants in the indentures; and
- any other terms of the debt securities not inconsistent with the applicable indentures.

We may sell the debt securities at a substantial discount below their stated principal amount. We will describe U.S. federal income tax considerations, if any, applicable to debt securities sold at an original issue discount in the prospectus supplement. An “original issue discount security” is any debt security sold for less than its face value, and which provides that the holder cannot receive the full face value if maturity is accelerated. The prospectus supplement relating to any original issue discount securities will describe the particular provisions relating to acceleration of the maturity upon the occurrence of an event of default. In addition, we will describe U.S. federal income tax or other considerations applicable to any debt securities that are denominated in a currency or unit other than U.S. dollars in the prospectus supplement.

Conversion and Exchange Rights

The prospectus supplement will describe, if applicable, the terms on which you may convert debt securities into or exchange them for debt securities, common stock, or other securities or property. The conversion or exchange may be mandatory or may be at your option. The prospectus supplement will describe how the amount of debt securities, number of shares of common stock, or other securities or property to be received upon conversion or exchange would be calculated.

Subordination of Subordinated Debt Securities

The indebtedness underlying any subordinated debt securities will be payable only if all payments due under our senior indebtedness, as defined in the applicable indenture and any indenture supplement, including any outstanding senior debt securities, have been made. If we distribute our assets to creditors upon any dissolution, winding-up, liquidation or reorganization or in bankruptcy, insolvency, receivership or similar proceedings, we must first pay all amounts due or to become due on all senior indebtedness before we pay the principal of, or any premium or interest on, the subordinated debt securities. In the event the subordinated debt securities are accelerated because of an event of default, we may not make any payment on the subordinated debt securities until we have paid all senior indebtedness or the acceleration is rescinded. If the payment of subordinated debt securities accelerates because of an event of default, we must promptly notify holders of senior indebtedness of the acceleration.

If we experience a bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of subordinated debt securities may receive less, ratably, than our other creditors. The indenture for subordinated debt securities may not limit our ability to incur additional senior indebtedness.

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Form, Exchange, and Transfer

We will issue debt securities only in fully registered form, without coupons, and only in denominations of \$1,000 and integral multiples thereof, unless the prospectus supplement provides otherwise. The holder of a debt security may elect, subject to the terms of the indentures and the limitations applicable to global securities, to exchange them for other debt securities of the same series of any authorized denomination and of similar terms and aggregate principal amount.

Holders of debt securities may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer duly executed, at the office of the transfer agent we designate for that purpose. We will not impose a service charge for any registration of transfer or exchange of debt securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer or exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place where we will make payment on debt securities.

If we redeem the debt securities, we will not be required to issue, register the transfer of or exchange any debt security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange of any debt security selected for redemption, except the unredeemed portion of the debt security being redeemed.

Global Securities

The debt securities may be represented, in whole or in part, by one or more global securities that will have an aggregate principal amount equal to that of all debt securities of that series. Each global security will be registered in the name of a depositary identified in the prospectus supplement. We will deposit the global security with the depositary or a custodian, and the global security will bear a legend regarding the restrictions on exchanges and registration of transfer.

No global security may be exchanged in whole or in part for debt securities registered, and no transfer of a global security in whole or in part may be registered, in the name of any person other than the depositary or any nominee or successor of the depositary unless:

- the depositary is unwilling or unable to continue as depositary; or
- the depositary is no longer in good standing under the Exchange Act or other applicable statute or regulation.

The depositary will determine how all securities issued in exchange for a global security will be registered.

As long as the depositary or its nominee is the registered holder of a global security, we will consider the depositary or the nominee to be the sole owner and holder of the global security and the underlying debt securities. Except as stated above, owners of beneficial interests in a global security will not be entitled to have the global security or any debt security registered in their names, will not receive physical delivery of certificated debt securities and will not be considered to be the owners or holders of the global security or underlying debt securities. We will make all payments of principal, premium and interest on a global security to the depositary or its nominee. The laws of some jurisdictions require that some purchasers of securities take physical delivery of such securities in definitive form. These laws may prevent you from transferring your beneficial interests in a global security.

Only institutions that have accounts with the depositary or its nominee and persons that hold beneficial interests through the depositary or its nominee may own beneficial interests in a global security. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants. Ownership of beneficial interests in a global security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the depositary or any such participant.

The policies and procedures of the depositary may govern payments, transfers, exchanges and others matters relating to beneficial interests in a global security. We and the trustee will assume no responsibility or liability for any aspect of the depositary's or any participant's records relating to, or for payments made on account of, beneficial interests in a global security.

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Payment and Paying Agents

We will pay principal and any premium or interest on a debt security to the person in whose name the debt security is registered at the close of business on the regular record date for such interest.

We will pay principal and any premium or interest on the debt securities at the office of our designated paying agent. Unless the prospectus supplement indicates otherwise, the corporate trust office of the trustee will be the paying agent for the debt securities.

Any other paying agents we designate for the debt securities of a particular series will be named in the prospectus supplement. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place of payment for the debt securities.

The paying agent will return to us all money we pay to it for the payment of the principal, premium or interest on any debt security that remains unclaimed for a specified period. Thereafter, the holder may look only to us for payment, as an unsecured general creditor.

Consolidation, Merger, and Sale of Assets

Under the terms of the indentures, so long as any securities remain outstanding, we may not consolidate or enter into a share exchange with or merge into any other person, in a transaction in which we are not the surviving corporation, or sell, convey, transfer or lease our properties and assets substantially as an entirety to any person, unless:

- the successor assumes our obligations under the debt securities and the indentures;
and
- we meet the other conditions described in the indentures.

Events of Default

Each of the following will constitute an event of default under each indenture:

- failure to pay the principal of or any premium on any debt security when due;
- failure to pay any interest on any debt security when due, for more than a specified number of days past the due date;
- failure to deposit any sinking fund payment when due;
- failure to perform any covenant or agreement in the indenture that continues for a specified number of days after written notice has been given by the trustee or the holders of a specified percentage in aggregate principal amount of the debt securities of that series;
- events of bankruptcy, insolvency or reorganization; and
- any other event of default specified in the prospectus supplement.

If an event of default occurs and continues, both the trustee and holders of a specified percentage in aggregate principal amount of the outstanding securities of that series may declare the principal amount of the debt securities of that series to be immediately due and payable. The holders of a majority in aggregate principal amount of the outstanding securities of that series may rescind and annul the acceleration if all events of default, other than the nonpayment of accelerated principal, have been cured or waived.

Except for its duties in case of an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request or direction of any of the holders, unless the holders have offered the trustee reasonable indemnity. If they provide this indemnification and subject to conditions specified in the applicable indenture, the holders of a majority in aggregate principal amount of the outstanding securities of any series may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

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No holder of a debt security of any series may institute any proceeding with respect to the indentures, or for the appointment of a receiver or a trustee, or for any other remedy, unless:

- the holder has previously given the trustee written notice of a continuing event of default;
- the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series have made a written request upon the trustee, and have offered reasonable indemnity to the trustee, to institute the proceeding;
- the trustee has failed to institute the proceeding for a specified period of time after its receipt of the notification; and
- the trustee has not received a direction inconsistent with the request within a specified number of days from the holders of a specified percentage in aggregate principal amount of the outstanding securities of that series.

Modification and Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; and
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of notes may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, we and the trustee may only make the following changes with the consent of the holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of notes;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption, of any debt securities; or
- reducing the percentage of debt securities the holders of which are required to consent to any amendment.

The holders of a majority in principal amount of the outstanding debt securities of any series may waive any past default under the indenture with respect to debt securities of that series, except a default in the payment of principal, premium or interest on any debt security of that series or in respect of a covenant or provision of the indenture that cannot be amended without each holder's consent.

Except in limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding debt securities of any series entitled to give or take any direction, notice, consent, waiver or other action under the indentures. In limited circumstances, the trustee may set a record date. To be effective, the action must be taken by holders of the requisite principal amount of such debt securities within a specified period following the

record date.

Defeasance

To the extent stated in the prospectus supplement, we may elect to apply the provisions in the indentures relating to defeasance and discharge of indebtedness, or to defeasance of restrictive covenants, to the debt securities of any series. The indentures provide that, upon satisfaction of the requirements described below, we may terminate all of our obligations under the debt securities of any series and the applicable indenture, known as legal defeasance, other than our obligation:

- to maintain a registrar and paying agents and hold monies for payment in trust;
- to register the transfer or exchange of the notes; and
- to replace mutilated, destroyed, lost or stolen notes.

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In addition, we may terminate our obligation to comply with any restrictive covenants under the debt securities of any series or the applicable indenture, known as covenant defeasance.

We may exercise our legal defeasance option even if we have previously exercised our covenant defeasance option. If we exercise either defeasance option, payment of the notes may not be accelerated because of the occurrence of events of default.

To exercise either defeasance option as to debt securities of any series, we must irrevocably deposit in trust with the trustee money and/or obligations backed by the full faith and credit of the United States that will provide money in an amount sufficient in the written opinion of a nationally recognized firm of independent public accountants to pay the principal of, premium, if any, and each installment of interest on the debt securities. We may only establish this trust if, among other things:

- no event of default shall have occurred or be continuing;
- in the case of legal defeasance, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the Internal Revenue Service a ruling or there has been a change in law, which in the opinion of our counsel, provides that holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;
- in the case of covenant defeasance, we have delivered to the trustee an opinion of counsel to the effect that the holders of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred; and
- we satisfy other customary conditions precedent described in the applicable indenture.

Notices

We will mail notices to holders of debt securities as indicated in the prospectus supplement.

Title

We may treat the person in whose name a debt security is registered as the absolute owner, whether or not such debt security may be overdue, for the purpose of making payment and for all other purposes.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York.

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DESCRIPTION OF UNITS

We may issue units comprised of one or more shares of common stock, warrants, and/or debt securities in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including, but not limited to:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Common Stock,” “Description of Warrants,” and “Description of Debt Securities” will apply to each unit and to any common stock, debt security, and/or warrant included in each unit, respectively.

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PLAN OF DISTRIBUTION

We may sell securities in any of the ways described below or in any combination:

- to or through underwriters or dealers;
- through one or more agents; or
- directly to purchasers or to a single purchaser.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities will describe the terms of the offering, including the following:

- the name or names of any underwriters, dealers or agents and the amount of securities underwritten or purchased by each of them; and
- the public offering price of the securities and the proceeds to us and any discounts, commissions or concessions allowed or reallocated or paid to dealers.

Any offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

Agents, underwriters and other third parties described above may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution from us with respect to payments which the agents, underwriters or other third parties may be required to make in respect thereof. Agents, underwriters and such other third parties may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under

agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and the accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale.

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Certain persons participating in an offering may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with rules and regulations under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a short covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

EXPERTS

The consolidated financial statements of Enova Systems, Inc. as of December 31, 2010 and 2009 have been incorporated by reference herein in reliance upon the report of PMB Helin Donovan, LLP, independent registered public accounting firm, given upon the authority of that firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of our securities offered hereby will be passed upon for us by Reed Smith LLP, San Francisco, California.

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WHERE YOU CAN FIND MORE INFORMATION

We electronically file annual, quarterly and special reports, proxy and information statements and other information with the SEC. The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>. Our website address is www.enovasystems.com. Information contained in, or accessible through, our website is not a part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any filings that we will make with the SEC (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the initial filing date of the registration statement of which this prospectus forms a part and prior to the termination of this offering:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed on March 30, 2010;
- Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2011 filed on May 12, 2011;
- Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2011 filed on August 15, 2011;
- Our Current Reports on Form 8-K filed on January 20, 2011, and June 21, 2011; and
- The description of our common stock included in our registration statement on Form 8-A filed with the SEC on August 28, 2006.

We will provide without charge upon written or oral request, to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Chief Financial Officer
Enova Systems, Inc.
1560 West 190th Street
Torrance, CA 90501
(310) 527-2800