

A123 SYSTEMS, INC.
Form 424B5
March 28, 2011

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The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and they are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, Dated March 28, 2011

Preliminary Prospectus Supplement (to Prospectus Dated March 28, 2011)

A123 Systems, Inc.

\$125,000,000

% Convertible Subordinated Notes due 2016

We are offering \$125,000,000 aggregate principal amount of our % convertible subordinated notes due 2016, which we refer to herein as the convertible notes. We will pay interest on the convertible notes on April 15 and October 15 of each year, beginning October 15, 2011. The convertible notes will mature on April 15, 2016. The convertible notes will be our general unsecured subordinated obligations, will be subordinated to all of our present and future senior indebtedness will be subordinated to all of our future senior subordinated indebtedness and will rank equally with all of our future subordinated indebtedness. The convertible notes will be structurally subordinated to all present and future debt and other obligations of our subsidiaries. In addition, the convertible notes are effectively subordinated to all of our present and future secured debt to the extent of the value of the collateral securing that debt. The convertible notes will be issued only in denominations of \$1,000 and in integral multiples of \$1,000.

Upon conversion, we will deliver shares of common stock at an initial conversion rate of shares of our common stock for each \$1,000 principal amount of convertible notes (equivalent to an initial conversion price of approximately \$ per share of our common stock). Holders may surrender their convertible notes for conversion

any time prior to the close of business on the third business day immediately preceding the maturity date. Upon a fundamental change (as defined herein), holders may require us to repurchase for cash all or part of their convertible notes at a price equal to 100% of the principal amount of the convertible notes being repurchased plus accrued and unpaid interest.

To the extent the underwriters sell more than \$125,000,000 in principal amount of convertible notes, the underwriters will have the option to purchase a maximum of \$18,750,000 additional principal amount of convertible notes within 30 days from the date of the initial issuance of the convertible notes from us at the public offering price less the underwriting discount.

Concurrently with this convertible notes offering, we are offering up to 18,000,000 shares of our common stock (or a total of 20,700,000 shares if the underwriters exercise in full their option to purchase additional shares) pursuant to a separate prospectus supplement. This convertible notes offering is not contingent upon the common stock offering, and the common stock offering is not contingent upon this convertible notes offering.

Our common stock is listed on The NASDAQ Global Select Market under the symbol "AONE." The last reported sale price of our common stock on March 25, 2011 was \$7.76 per share.

Investing in the convertible notes involves risks. See "Risk Factors" beginning on page S-17 of this prospectus supplement and "Item 1A. Risk Factors" beginning on page 27 of our Annual Report on Form 10-K for the year ended December 31, 2010, which is incorporated by reference into this prospectus supplement and the accompanying prospectus.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	Per Note	Total
Public offering price	%	\$
Underwriting discounts and commissions	%	\$
Proceeds, before expenses, to us	%	\$

The public offering price set forth above does not include accrued interest, if any. Interest on the convertible notes will accrue from April , 2011.

The underwriters expect to deliver the convertible notes on or about April , 2011 only in book-entry form through the facilities of The Depository Trust Company.

Deutsche Bank Securities Goldman, Sachs & Co.

Morgan Stanley Barclays Capital

Lazard Capital Markets Pacific Crest Securities

The date of this prospectus supplement is , 2011.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC, using a shelf registration process. Both this prospectus supplement and the accompanying prospectus include or incorporate by reference important information about us, the convertible notes, our common stock and other information you should know before investing. You should read both this prospectus supplement and the accompanying prospectus as well as the additional information described under "Where You Can Find More Information" in this prospectus supplement before making an investment decision.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any related free writing prospectus we file with the SEC. We have not authorized anyone to provide you with different information. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus supplement or an offer to sell or the solicitation of any offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus supplement and the accompanying prospectus, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

This prospectus supplement may add to, update or change the information in the accompanying prospectus. If information in this prospectus supplement is inconsistent with information in the accompanying prospectus, this prospectus supplement will apply and will supersede that information in the accompanying prospectus. Generally, when we refer to the prospectus, we are referring to both the prospectus supplement and the accompanying prospectus.

We use various trademarks and trade names in our business, including without limitation "A123" and "A123 Systems." This prospectus supplement also contains trademarks and trade names of other businesses that are the property of their respective holders.

Except for purposes of the "Description of the Convertible Notes" and "Prospectus Supplement Summary The Offering" sections of this prospectus supplement or unless stated otherwise or the context otherwise requires, we use the terms "A123," "our company," "we," "us" and "our" in this prospectus supplement to refer to A123 Systems, Inc. and its subsidiaries.

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PROSPECTUS SUPPLEMENT SUMMARY

The following summary includes basic information about our company and this offering. It may not contain all of the information that is important to you. For a more complete understanding of our company and this offering, we encourage you to read this entire prospectus supplement, including the documents incorporated in this prospectus supplement, and the accompanying prospectus carefully.

Overview

We design, develop, manufacture and sell advanced, rechargeable lithium-ion batteries and energy storage systems. We believe that lithium-ion batteries will play an increasingly important role in facilitating a shift toward cleaner forms of energy. Using our innovative approach to materials science and battery engineering and our systems integration and manufacturing capabilities, we have developed a broad family of high-power lithium-ion batteries and battery systems. This family of products, combined with our strategic partner relationships in the transportation, electric grid services and commercial markets, positions us well to address these markets for next-generation energy storage solutions.

The world economy is undergoing a transformation driven by rising demands for high-output and fuel-efficient energy solutions that are less harmful to the environment. Global economic growth, geo-political conflict in oil-producing regions and escalating exploration and production costs and related risks (e.g., BP oil spill) are increasing market demand for innovative energy alternatives that can help reduce dependence on fossil fuels. Meanwhile, heightened concerns about global warming and climate change are giving rise to stricter environmental standards and stronger regulatory support for energy sources that are not harmful to the environment. As a result, clean energy technologies are experiencing increasing popularity and greater adoption which is fueling continued innovation and improving the economic viability of such technologies.

During 2008, 2009 and 2010, 19%, 59% and 59% of our product revenue was derived from sales in the transportation market, respectively, 5%, 15% and 18%, was derived from sales in the electric grid market, respectively, and 76%, 26% and 23% was derived from sales in the commercial market, respectively.

2010 product revenue distribution by market

2010 revenue distribution by region

Note: Top 3 European Union includes the Czech Republic, Germany and United Kingdom.

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Our Target Markets

We believe clean energy trends are reflected in a growing demand for advanced battery technologies in end markets such as transportation, electric grid services and commercial.

Transportation

We believe consumers are increasingly shifting away from conventional gasoline engines to hybrid electric vehicles, or HEVs, plug-in hybrid electric vehicles, or PHEVs, and electric vehicles, or EVs, because of the high prices of conventional fuel, greater awareness of environmental issues and government regulation. These vehicles offer improved gas mileage and reduced carbon emissions and may ultimately provide a vehicle alternative that eliminates the need for conventional gasoline engines. Industry experts project that by 2020 almost half of U.S. vehicles will require some form of battery technology to meet new Corporate Average Fuel Economy, or CAFE, regulatory standards. President Obama has announced national standards mandating that U.S. passenger vehicles and light trucks must average 35.5 miles per gallon by 2016. Moreover, governments across the globe are considering or have already implemented other policies that support vehicle electrification. Overall, we believe this demand for greener vehicle technologies, including advanced batteries, is increasing, a view supported by the fact that most vehicle original equipment manufacturers, or OEMs, are pursuing electrification programs at an accelerated pace.

On a cost per mile driven basis, electricity is a more economical source of energy than gasoline. However, historically, the vehicle operating savings of using electricity have been more than offset by the cost of the corresponding electrical storage systems. With the advancement of battery technologies, the use of battery systems to deliver energy to hybrid powertrains is becoming more economically viable. We believe this trend will lead to increased adoption of HEVs, PHEVs and EVs and, as a result, create significant opportunities for battery suppliers with the necessary technology, experience and manufacturing capabilities to develop high performance batteries. We expect that if consumers begin realizing more immediate cost savings by switching away from gasoline powered vehicles to hybrid vehicles, the resulting increased adoption of HEVs, PHEVs and EVs will significantly contribute to the growth of the next-generation battery market.

In the passenger vehicle market, we have an agreement with Fisker Automotive, Inc., or Fisker, to supply advanced automotive battery systems over a multi-year period for the Fisker Karma PHEV. We have been selected to develop battery packs, using cells that we produce, for a new 2012 model year electric passenger car from Shanghai Automotive Industry Corp., or SAIC, the largest automaker in China, and we are currently providing the development work related to this agreement. We have also established a joint venture with SAIC that will assemble battery packs for subsequent sale to SAIC and to other customers in China. Additionally, we recently announced that a major North American OEM has awarded A123 a production contract to manufacture battery packs for a new electric passenger vehicle that is expected to go into production in 2013. We are designing and developing batteries and battery systems for BMW, Delphi, GM, and other customers, for multiple vehicle models. With the Fisker Karma PHEV expected to go into volume production in the first half of this year, we expect revenue from the transportation market to ramp up significantly in the second quarter.

Similar industry dynamics are creating a demand for new battery technology applications in the heavy-duty transportation market, particularly in buses, trucks and other industrial vehicles. The higher fuel consumption rate of these large vehicles makes the potential fuel cost savings from the use of batteries even greater than passenger vehicles.

We are engaged in design and development activities with multiple heavy-duty vehicle manufacturers and tier 1 suppliers regarding their HEV, PHEV and EV development efforts for

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trucks and buses, and we have been selected to co-develop battery systems for several of them. We have a supply agreement to provide batteries for use in battery systems developed by Magna Steyr for deployment in a heavy-duty HEV application. In addition, we have a development and supply agreement with BAE Systems, and are in volume production for battery systems for BAE Systems' HybriDrive propulsion system, which is currently being deployed in Daimler's Orion VII hybrid electric buses. We are also supplying Navistar with battery systems for its heavy-duty eStar electric vehicles. We also have been selected to develop the battery system for an additional Daimler hybrid electric bus program and to supply battery systems for production of hybrid power systems to be installed on a Ford F550-based PHEV for Eaton. Several government authorities and corporations are evaluating battery technologies for their large fleets of heavy-duty vehicles. For example, the City of London has announced plans to convert its fleet of buses to HEVs, with a goal that by 2012 all new buses entering the fleet will be HEVs.

Electric Grid Services

Applications in the electric grid market present another significant opportunity for the use of advanced battery systems. Performance and reliability are essential to electric transmission and distribution grids. To preserve electric grid integrity, grid operators often need to call on resources to provide critical ancillary services such as standby reserve capacity and frequency regulation services. Resources required for standby reserve capacity services must ramp up and down quickly to offset sudden, short-term generator or transmission line outages. Resources for frequency regulation services are called upon to adjust for minute-to-minute frequency fluctuations in the grid due to demand and supply changes. Traditionally, these grid services are provided by running select power plants on the grid below their full load capability so they can be called on and ramped up quickly as needed. Advanced batteries capable of providing rapid charge and discharge cycles as well as high power over a long period provide these services more cost effectively and efficiently than running power plants at sub-optimal operating levels. Through the use of batteries, the portion of power plant capacity normally reserved for ancillary services to provide standby reserve capacity and frequency regulation can be freed up to operate at full capacity and produce more electricity and associated revenue.

We believe we are the leading producer of advanced lithium ion batteries for electric grid services, with over 42 megawatts delivered. Our leading customer, AES Energy Storage LLC, or AES, has ordered over 80 megawatts of our products to-date for electric grid projects in California, New York, the mid-Atlantic and midwestern United States, and Chile. In addition, we have been selected as the battery supplier to three Smart Grid projects funded by the Department of Energy American Recovery and Reinvestment Act, or ARRA, funding awards to Southern California Edison, or SCE, and The Detroit Edison Company, or DTE, to demonstrate the viability of advanced Smart Grid technologies. SCE will use our advanced battery technology and Department of Energy, or DOE, funding to implement a \$53.5 million Tehachapi Wind Energy Storage Project. DTE is expected to use our battery technology in its plan to implement Community Energy Storage systems in its Michigan service territory.

We believe the escalating demand for renewable energy technologies will serve as an additional catalyst for the adoption of advanced batteries in electric grid applications. Wind and solar energy facilities are expected to be important sources of new electricity generation in the future. However, wind and solar are intermittent power sources that place additional demands on grid stabilization. Advanced batteries can be used to supplement these next generation technologies by smoothing their output by providing regulation services and excess energy storage during periods of high transmission line usage or low customer demand.

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Commercial

Commercial applications represent another attractive market for advanced batteries. There are two types of batteries for commercial applications: high-energy batteries and high-power batteries. High-energy batteries are designed to store large amounts of energy for long periods, but are not required to release this energy at a high rate. These batteries are used in certain portable consumer electronics such as laptop computers, PDAs and cell phones, which require gradual, consistent delivery of energy in low-power form. High-power batteries, on the other hand, are designed not only to store large amounts of energy, but also to deliver it at a very high rate, or in high-power form. While the battery market for high energy, low-power portable consumer products is mature and well supplied by several vendors, a market opportunity exists for advanced batteries that can deliver high-power in a light-weight and portable package.

In the commercial market, we are seeing growth in several application areas. We have over 30 development and production programs with customers that are using our cells or systems in telecommunications, information technology, material handling, and medical products. These programs and our pipeline of opportunities further reinforce our belief that commercial markets can represent at least 10% of our revenue from a long-term perspective, even if our transportation and electric grid revenues scale as rapidly as we expect.

Our Competitive Strengths

We believe the following combination of capabilities distinguishes us from our competitors and positions us to compete effectively and benefit from the expected growth in the advanced energy storage market:

Materials science and development expertise. Our proprietary materials formulations and coating techniques allow us to adjust the characteristics of our battery components to meet different energy and power requirements across our many applications and our core materials science has been successfully validated in high-volume production.

Battery design capabilities. We have been an innovator in the packaging of lithium-ion batteries. These capabilities allow us to introduce optimal packages in various forms and sizes designed to deliver our technology into many different applications targeted at the transportation and grid markets.

Battery systems engineering and integration expertise. Our expertise in the engineering and integration of full battery systems allows us to customize our batteries and deliver fully-integrated systems, which are necessary to compete successfully in certain end markets.

Vertical integration from battery chemistry to battery system design services. Our vertical integration from batteries to battery systems has allowed us to develop flexible technology modules at every step of battery development, including a patent-pending scalable prismatic battery system architecture that allows common modules to be configured according to varied transportation customer requirements.

Industry leading partners in focused markets. We work with leaders in each of our target markets, such as AES, BAE Systems, BMW, Daimler, Fisker, Gillette, Navistar and SAIC. We have entered into agreements relating to joint design and development efforts with several major passenger vehicle manufacturers and tier 1 suppliers and continue to work with General Electric to draw on their research and technology development expertise in our target markets.

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High-quality, volume manufacturing facilities and proprietary process technologies. We have over 1.2 million square feet of manufacturing facilities in China, Korea, Michigan and Massachusetts, with approximately 540,000 square feet available for active manufacturing use as of December 31, 2010. Over the past several years, we have developed high-volume production expertise and replicable manufacturing processes that we believe we can scale to meet increasing demands for our products.

Cells with proven capabilities across multiple transportation applications. Through our supply agreements in the transportation market, we have demonstrated the ability to compete in all transportation markets globally. These production programs demonstrate and validate the price/performance of our cells, modules and systems in the marketplace.

Manufacturing

We perform most of our manufacturing at our facilities using our proprietary, high-volume process technologies. Our internal manufacturing operations allow us to directly control product quality and minimize the risks associated with disclosing proprietary technology to outside parties during production. We control every stage in the manufacture of our products except for the final assembly of one battery cell model and certain battery systems. Over the past several years, we have developed high-volume production expertise and replicable manufacturing processes that we believe we can scale to meet increasing demands for our products. Our manufacturing processes can be modified to manufacture battery products for different applications and can be replicated to meet increasing customer demands.

Our cylindrical batteries are in volume production and are commercially available for use in automotive and heavy duty vehicles. Our next-generation prismatic batteries are currently being produced in our Livonia, Michigan facility, which officially opened on September 13, 2010. This 291,000 square foot facility is designed to enable the complete production process, including research and development, manufacturing of high-value components, cell fabrication, module fabrication and the final assembly of complete battery packs ready for vehicle integration. When fully operational, it is expected to expand our overall manufacturing capabilities by up to 600 megawatt hours per year, contributing to our plan to expand our manufacturing capabilities to more than 760 megawatt hours annually by the first quarter of 2012. As part of our continuing U.S. manufacturing ramp-up, we also plan to open a coating plant in Romulus, Michigan, expected to come on line during the first half of 2011.

As of December 31, 2010, our annual manufacturing capacity was approximately 345.3 million watt hours. We have over 1.2 million square feet of manufacturing facilities in China, Korea, Livonia, Michigan, Romulus, Michigan and Hopkinton, Massachusetts where we produce or intend to produce batteries and battery systems. As of December 31, 2010, approximately 540,000 square feet were available for active manufacturing use. In conjunction with receiving federal and state incentive funding, we are currently expanding our domestic battery manufacturing capacity. This expansion would complement our existing manufacturing facilities in Asia, and provide us with more than sufficient capacity to support our existing customer pipeline and position us to win future customers.

Government Funding Support

We are taking advantage of U.S. federal, state and local government programs established to stimulate the economy and increase domestic investment in the battery

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industry and intend to continue doing so. The table below summarizes our existing and anticipated programs.

Program or Source	Amount and Type of Funds (dollars in millions)	Use of Proceeds	Conditions (dollars in millions)
Department of Energy (DOE) Battery Initiative	\$249.1 grant Accrued \$89.0 in reimbursements through December 31, 2010	Construction of new lithium-ion battery manufacturing facilities in Michigan	Required to spend one dollar for every incentive dollar received
DOE Advanced Technology Vehicles Manufacturing Loan Program, or ATVM Program	\$233.0 direct loan (amount subject to change and negotiation)	Manufacturing expansion	Required to spend one dollar for every four dollars borrowed Timing of loan documentation unknown
State of Michigan	\$10.0 grant \$9.0 received through December 31, 2010, of which \$8.2 has been used	Establishment of lithium-ion manufacturing plant in Michigan	Remainder subject to achievement of facility development milestones
Michigan Economic Growth Authority	\$25.3 estimated value of tax credit	Tax credit	Eligible for a 15-year tax credit Value of credits depends on the number of jobs created in Michigan
Michigan Economic Growth Authority	\$100.0 of potential tax credits Expect to receive approximately \$75.8 in proceeds when we meet the filing requirements for the tax year ending	Expenses related to construction of our integrated battery cell manufacturing plant	Eligible for tax credits equal to 50% of our capital investment expenses, up to \$100.0 over a four-year period (\$25.0 per year)

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December 31, 2012

Required to create 300 jobs no later than December 31, 2016 for the tax credit to be non-refundable; subject to repayment if we relocate jobs outside Michigan

Through December 31, 2010, we have incurred eligible expenses of \$151.6

State of Michigan

\$4.0 low interest, forgivable loan

Advance vehicle technology operations

Subject to milestones related to the development of our manufacturing facility

Met first milestone in first quarter of 2011; received initial \$1.2 advance

If we create 350 full time jobs by August 2012, debt will be completely forgiven

State of Michigan

\$2.0 grant

Research & development, or R&D

Required to demonstrate a smart grid stabilization system combined with renewable power sources

Received \$0.9 initial advance; eligible for remainder upon submitting for funding

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Program or Source	Amount and Type of Funds (dollars in millions)	Use of Proceeds	Conditions (dollars in millions)
City of Livonia	Complete exemption from personal property taxes incurred in Livonia on all new property from December 31, 2009 through December 31, 2023		Required to invest at least \$24.0 in personal property and create or locate 350 new jobs in the eligible district
Michigan Strategic Fund and the property owners for the Romulus, Michigan leased site	Exemptions, deductions, credits or other benefits As of December 2010, we have not yet met the conditions to be eligible for the benefits		Required to invest a certain amount of capital and create a certain number of jobs related to the facility in Romulus, Michigan
Massachusetts Clean Energy Technology Center	\$5.0 forgivable loan Fully drawn as of December 31, 2010	Working capital, capital expenses, and leasehold improvements for our new Waltham, Massachusetts corporate headquarters and Westborough, Massachusetts facilities	Half the loan will be forgiven if we create and maintain certain number of jobs in Massachusetts; other half forgiven if we make or commit to make capital expenditures and leasehold improvements of at least \$12.5 in capital expenses or leasehold improvements by October 2011 Reasonably expect to meet the capital expenditure conditions Remaining \$2.5 recorded in long-term debt until we have reasonable assurance that we will comply with the job creation conditions

Employees

As of December 31, 2010, we had 2,032 full-time employees, with 324 in research and development, 1,493 in manufacturing operations/supply chain, 43 in sales and marketing and 172 in general and administration. None of our employees are represented by labor unions or have collective bargaining agreements, except for certain employees in our Changzhou, China facilities who established a Labor Union Commission in 2007.

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Recent Developments

Interruption in Supply from Tohoku Earthquake

We have a single source supplier in Japan that supplies materials used in the electrode coating process of the batteries that we manufacture and supply to our customers. As a result of the earthquake and tsunami that took place in Japan on March 11, 2011, this supplier suspended manufacturing operations at the factory where these materials are produced, which is located approximately 70 kilometers away from the damaged nuclear power plant in Fukushima. Other than the impact on this supplier, the earthquake has not affected the supply or availability of any other materials or components we use in our battery or battery pack manufacturing processes. As described below, we believe that we are taking appropriate steps to manage this supply disruption and to mitigate risk to our production schedule. In addition, we have not seen any adverse impact on our customers or on our customer demand as a result of the earthquake.

The supplier has informed us that its factory sustained minor physical damage and that damage assessment and repair work is underway with a focus on restoring a stable power supply. The damage assessment is expected to take one to two months to complete. The regional electrical supply and its adequacy for plant operations are still being determined. The supplier's plant employees are also experiencing commuting difficulties due to fuel shortages, but we have been informed that they are returning to work. The supplier has indicated that local transportation and logistics challenges are improving and is continuing to keep us closely informed. The supplier intends to resume plant operations as soon as conditions permit and, if the situation in Fukushima relating to the damaged nuclear power plant does not worsen, the supplier has informed us that it expects to resume manufacturing operations within six months. However, upon resumption of the supplier's production, we expect that the supplier might not be able to supply material quantities to the level of our planned demand.

We currently have inventory of these materials on hand and in transit that we believe will support our manufacturing operations through May 24, 2011. We believe this inventory will be sufficient to meet the current production schedule and second quarter financial guidance that we announced in February and that we discuss below. The supplier has further indicated that it will supply us with additional materials from its finished goods inventory sufficient to support our battery manufacturing operations into September 2011 (based on our current annual production forecast). The supplier has not yet confirmed shipping dates for these additional materials, however, and the timing of our receipt will depend on local logistics conditions continuing to improve.

At the same time, we are currently engaged in discussions to secure an alternative supplier to qualify and supply an appropriate substitute for use in our battery products. We estimate that this qualification process will take approximately four to six months to complete.

We believe that either the supply of additional materials from our current supplier or the qualification of a second source (or a combination of the two) within the estimated timeframes is likely to be achieved and, if achieved, we would be able to meet our 2011 production goals and our 2011 revenue guidance. However, many of the factors in this situation are beyond our control, and an unfavorable development relating to any of these factors could have a material adverse effect on our results of operations. See "Risk Factors Additional Risks Related to Our Business."

2011 Outlook

We continue to expect to see an inflection point in our revenue in the second quarter of 2011 with several customer programs scheduled to enter volume production. As we approach

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the end of the first quarter of 2011, we believe that revenue will be in the \$16-18 million range, at the lower end of the previously stated range of upper teens to low twenty million dollars set out on our fourth quarter 2010 earnings conference call on February 28, 2011. We reiterate that we expect to have second quarter 2011 revenue approximately double that of the first quarter and total revenue for 2011 in the range of \$210 million to \$225 million, or an annual growth of approximately 115% to 130%, based on our current assessment of customer demand and in part on their ability to achieve their planned production schedules. Uncertainty that has been widely reported in the entire automotive supply chain could cause us not to meet those expected targets.

Consistent with the guidance provided in our fourth quarter 2010 earnings conference call on February 28, 2011, as a result of the significant manufacturing capacity that has come on line in Michigan and because our volumes are not scheduled to increase until the second quarter, we expect unabsorbed manufacturing expenses in the first quarter of 2011 to approximately double from the levels in the fourth quarter of 2010. The result of these factors will be a reduction in gross margin during the first quarter, which we expect to be ameliorated as revenue ramps up in the second quarter and through the latter half of the year. We believe the continued rapid increase in production volumes and revenue will enable us to move to positive gross margins in early 2012.

Risk Factors

Our business is subject to risks, including those described in "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2010, which is filed with the SEC and incorporated by reference in this prospectus supplement. We also refer you to "Risk Factors" in this prospectus supplement.

Our Principal Executive Offices

Our principal executive offices are located at 200 West Street, Waltham, Massachusetts 02451, and our telephone number is (617) 778-5700.

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The Offering

The summary below describes the principal terms of the convertible notes. Certain of the terms and conditions described below are subject to important limitations and exceptions. The "Description of the Convertible Notes" section of this prospectus supplement contains a more detailed description of the terms and conditions of the convertible notes. As used in this section, "we," "our," and "us" refer to A123 Systems, Inc. and not to its consolidated subsidiaries.

Issuer	A123 Systems, Inc.
Convertible Notes Offered	\$125,000,000 aggregate principal amount (or \$143,750,000 if the underwriters exercise in full their option to purchase additional convertible notes) of % convertible subordinated notes due April 15, 2016.
Maturity	April 15, 2016
No Optional Redemption by the Company	The convertible notes may not be redeemed at our election prior to the scheduled maturity date.
Ranking	<p>The convertible notes will be our general unsecured subordinated obligations, will be subordinated to all of our present and future senior indebtedness, will be subordinated to all of our future senior subordinated indebtedness and will rank equally with all of our future subordinated indebtedness. The convertible notes will be structurally subordinated to all present and future debt and other obligations of our subsidiaries. In addition, the convertible notes are effectively subordinated to all of our present and future secured debt to the extent of the value of the collateral securing that debt. As of December 31, 2010, we had outstanding approximately \$10.0 million of senior indebtedness.</p> <p>The terms of the indenture under which the convertible notes will be issued do not limit our ability to incur additional indebtedness, senior or otherwise.</p>
Right to Convert	<p>Holders may surrender their convertible notes, in integral multiples of \$1,000 principal amount, for conversion any time prior to the close of business on the third business day immediately preceding the maturity date.</p> <p>The initial conversion rate for each \$1,000 aggregate principal amount of convertible notes is shares of common stock per \$1,000 aggregate principal amount of convertible notes, equivalent to a conversion price of approximately \$ per share of our common stock. Such conversion rate will be subject to adjustment in certain events but will not be adjusted for accrued interest.</p>

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Settlement upon Conversion	<p>Upon conversion of the convertible notes, we will deliver to holders in full satisfaction of our conversion obligation shares of our common stock in an amount equal to (1) the aggregate principal amount of convertible notes to be converted, <i>divided by</i> \$1,000, <i>multiplied by</i> (2) the conversion rate in effect on the relevant conversion date. No fractional shares will be issued upon conversion. Instead, we will pay cash in lieu of fractional shares based on the closing sales price of our common stock on the relevant conversion date. We will deliver the consideration due in respect of any conversion on the third business day immediately following the relevant conversion date.</p> <p>In addition, following a "make whole adjustment event" (as defined herein), we will increase the applicable conversion rate for a holder who elects to convert in connection with such make whole adjustment event by a number of additional shares of our common stock as described under "Description of the Convertible Notes Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event."</p>
Repurchase at Holder's Option upon a Fundamental Change	<p>If we undergo a "fundamental change" (as defined herein), you will have the option to require us to repurchase all or any portion of your convertible notes in integral multiples of \$1,000 principal amount. The fundamental change repurchase price will be 100% of the principal amount of the convertible notes to be repurchased plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date. We will pay cash for all convertible notes so repurchased.</p>
Use of Proceeds	<p>We estimate that the net proceeds from this offering, after deducting the estimated underwriting discounts and commissions and offering expenses, will be approximately \$117.1 million (or approximately \$135.3 million if the underwriters exercise in full their option to purchase additional convertible notes). We intend to apply the net proceeds from this offering for general corporate purposes. For more information, see "Use of Proceeds."</p>
No Prior Market	<p>The convertible notes will be new securities for which there is currently no market. The underwriters may make a market in the convertible notes, but they are not obligated to do so and may discontinue market-making at any time without notice. Accordingly, we cannot assure you that a liquid market for the convertible notes will develop or be maintained.</p>

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Trading	We do not intend to list the convertible notes on any securities exchange or automated dealer quotation system. Our common stock is listed on The Nasdaq Global Select Market under the symbol "AONE."
Certain Material U.S. Federal Income Tax Considerations	You should consult with your tax advisor with respect to the U.S. federal income tax considerations of owning the convertible notes in light of your own particular situation and with respect to any tax considerations arising under the laws of any state, local, foreign or other taxing jurisdiction. See "Certain Material U.S. Federal Income Tax Considerations."
Trustee and Paying Agent	U.S. Bank National Association S-12

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We have derived the following summary consolidated financial data from our audited consolidated financial statements. The historical financial information set forth below may not be indicative of our future performance. This information is only summary and should be read together with "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and our historical consolidated financial statements and notes to those statements included in our Annual Report on Form 10-K for the year ended December 31, 2010.

	Year Ended December 31,				
	2006	2007	2008	2009	2010
	(in thousands, except per share data)				
Revenue:					
Product	\$ 28,346	\$ 35,504	\$ 53,514	\$ 76,519	\$ 73,826
Services	6,002	5,845	15,011	14,530	23,486
Total revenue	34,348	41,349	68,525	91,049	97,312
Cost of revenue:					
Product	28,960	38,320	70,474	83,778	94,277
Services	4,417	4,499	10,295	9,963	20,474
Total cost of revenue	33,377	42,819	80,769	93,741	114,751
Gross profit (loss)	971	(1,470)	(12,244)	(2,692)	(17,439)
Operating expenses:					
Research, development and engineering	8,851	13,241	36,953	48,286	60,723
Sales and marketing	1,537	4,307	8,851	8,455	14,111
General and administrative	6,129	13,336	21,544	24,480	36,053
Production start-up				1,524	21,064
Total operating expenses	16,517	30,884	67,348	82,745	131,951
Operating loss	(15,546)	(32,354)	(79,592)	(85,437)	(149,390)
Other income (expense):					
Interest income	871	1,729	1,258	165	135
Interest expense	(641)	(716)	(812)	(1,206)	(1,430)
Gain (loss) on foreign exchange		502	(724)	682	(560)
Unrealized loss on preferred stock warrant liability	(362)	(57)	(286)	(515)	
Other income					(849)
Other (expense) income, net	(132)	1,458	(564)	(874)	(2,704)
Loss from operations, before tax	(15,678)	(30,896)	(80,156)	(86,311)	(152,094)
Provision for income taxes	40	97	275	278	843
Loss from operations, net of tax	(15,718)	(30,993)	(80,431)	(86,589)	(152,937)
Cumulative effect of change in accounting principle	(57)				
Net loss	(15,775)	(30,993)	(80,431)	(86,589)	(152,937)
Less: Net loss (income) attributable to the		27	(39)	810	377

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noncontrolling interest

Net loss attributable to A123 Systems, Inc.	(15,775)	(30,966)	(80,470)	(85,779)	(152,560)
Accretion to preferred stock	(26)	(35)	(42)	(45)	

Net loss attributable A123 Systems, Inc. common stockholders	\$ (15,801)	\$ (31,001)	\$ (80,512)	\$ (85,824)	\$ (152,560)
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	Year Ended December 31,				
	2006	2007	2008	2009	2010
	(in thousands, except per share data)				
Net loss per share attributable to common stockholders basic and diluted	\$ (2.65)	\$ (4.88)	\$ (9.04)	\$ (2.55)	\$ (1.46)
Weighted average number of common shares outstanding basic and diluted	5,971	6,351	8,904	33,669	104,364
Other Operating Data:					
Shipments (in watt hours, or Wh) (in thousands) (1)	20,016	32,010	44,900	66,461	62,883

(1)

We measure our product shipments in watt hours, or Wh, which refers to the aggregate amount of energy that could be delivered in a single complete discharge of a battery. We calculate watt hours for each of our battery models by multiplying the battery's amp hour, or Ah, storage capacity by the battery's voltage, or V, rating. For example, our 26650 battery is a 2.3 Ah battery that operates at 3.3 V, resulting in a 7.6 Wh rating. The Wh metric allows us and our investors to measure our manufacturing capacity and shipments, regardless of battery voltages and Ah specifications, utilizing a uniform and consistent metric.

	As of December 31,				
	2006	2007	2008	2009	2010
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 9,484	\$ 23,359	\$ 70,510	\$ 457,122	\$ 216,841
Working capital	14,314	30,727	69,345	470,424	191,892
Total assets	47,668	105,146	208,960	618,090	576,158
Preferred stock warrant liability	694	664	950		
Long-term debt, including current portion	5,404	6,071	10,522	13,894	9,982
Capital lease obligations, including current portion	1,120	1,121	684	604	20,226
Redeemable convertible preferred stock	62,884	132,914	234,954		
Redeemable common stock			11,500		
Total A123 Systems, Inc. stockholders' (deficit) equity	(34,032)	(62,603)	(133,428)	528,220	398,198

Consolidated Ratios of Earnings to Fixed Charges: We recorded a net loss from continuing operations for each of the five years in the period ended December 31, 2010. As a result, earnings were insufficient to cover fixed charges for those periods. See "Consolidated Ratios of Earnings to Fixed Charges."

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Concurrent Common Stock Offering

Concurrently with this convertible notes offering, we are offering 18,000,000 shares of our common stock (or a total of 20,700,000 shares if the underwriters for the common stock offering exercise in full their option to purchase additional shares of common stock) pursuant to a separate prospectus supplement. This convertible notes offering is not contingent upon the common stock offering, and the common stock offering is not contingent upon this convertible notes offering. We expect to raise approximately \$247.2 million in aggregate net proceeds from the two offerings. However, amounts sold in each offering may increase or decrease based on market conditions relating to a particular security. We cannot assure you that we will complete the concurrent common stock offering. See "Concurrent Common Stock Offering."

Unless we specifically state otherwise, the information in this prospectus supplement assumes the completion of the concurrent common stock offering and that the underwriters for the common stock offering do not exercise their option to purchase additional shares of common stock and that the underwriters for this convertible notes offering do not exercise their option to purchase additional convertible notes.

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FORWARD-LOOKING STATEMENTS

This prospectus supplement and the information incorporated by reference in this prospectus supplement include "forward-looking statements" within the meaning of U.S. securities law. These statements are based on current expectations, estimates, forecasts and projections about the industry in which we operate and the beliefs and assumptions of our management, and as such are inherently uncertain. These forward-looking statements include, but are not limited to, statements relating to: our ability to obtain new customers and supply agreements; our beliefs about future trends in our market; our financial and business projections for 2011; worldwide political, economic or business conditions; foreign currency exchange rates; competition in our industry; delays in customer and market demand for our products and solutions; and delays in the development, production and delivery of our products and solutions. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends" "plans," "believes," "seeks," "estimates," "continues" and "may" and variations of such words and similar expressions are intended to identify such forward-looking statements. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, which in some cases may be based on our growth strategies and anticipated trends in our business. These statements are only predictions based at the time they are made on our expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements. In particular, you should consider the risks outlined in the section of this prospectus supplement entitled "Risk Factors" and the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically under "Item 1A. Risk Factors" and elsewhere in our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

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RISK FACTORS

An investment in the convertible notes offered by this prospectus supplement and the accompanying prospectus involves a high degree of risk. You should carefully consider the following risk factors in addition to the remainder of this prospectus supplement and the accompanying prospectus, including the information incorporated by reference, before making an investment decision. In addition, you should carefully consider, among other things, the matters discussed under "Item 1A. Risk Factors" beginning on page 27 of our Annual Report on Form 10-K for the year ended December 31, 2010, and in other documents that we file with the SEC. The risks and uncertainties described in the documents incorporated by reference and those described below are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

If any of those risks actually occurs, our business, financial condition and results of operations would suffer. In that event, the market price of the convertible notes and any common stock issuable upon conversion of the convertible notes could decline, and you may lose all or part of your investment in the convertible notes. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See "Forward-Looking Statements."

Additional Risks Related to Our Business

If we are unable to obtain supplies of materials we use in the electrode coating process of our batteries sufficient to meet our planned demand levels, our results of operations could be materially adversely affected.

Our supply of materials we use in the electrode coating process of our batteries was disrupted by the earthquake and tsunami that occurred in Japan on March 11, 2011. We currently have inventory of these materials on hand and in transit that we believe will support our manufacturing operations through May 24, 2011. However, if we are not able to obtain these or additional materials from our supplier, or if there is a prolonged disruption in our suppliers' manufacturing capability and we are delayed or are not able to qualify a second source of supply, our results of operations would be materially adversely affected and we would not be able to achieve the financial guidance that we have previously announced and that we discuss above under "Prospectus Supplement Summary Recent Developments 2011 Outlook," including our 2011 revenue and growth projections, our expectation that unabsorbed manufacturing expenses will begin to decline in the second half of 2011 and that we will achieve positive gross margins in early 2012. In addition, although we are not currently aware of any other supply issue related to the earthquake in Japan affecting our business, there have been many reports of disruption in the automotive supply chain as a result of the earthquake. Our automotive customers comprise a substantial portion of our current and projected future revenue, and any such disruption in their supply chain or further disruption in our supply chain, or even the potential for such disruption, could cause delays in our programs and have a material adverse affect on our business, results of operations and financial outlook.

Risks Related to this Offering

Your right to receive payments on the convertible notes is subordinated to our present and future senior indebtedness, our future senior subordinated indebtedness and our present and future secured debt and any liabilities of our subsidiaries.

The convertible notes will be our general unsecured subordinated obligations, will be subordinated to all of our present and future senior indebtedness, will be subordinated to all

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of our future senior subordinated indebtedness and will rank equally with all of our future subordinated indebtedness. The convertible notes will be structurally subordinated to all present and future debt and other obligations of our subsidiaries. In addition, the convertible notes are effectively subordinated to all of our present and future secured debt to the extent of the value of the collateral securing that debt. See "Description of the Convertible Notes Subordination of the Convertible Notes."

In addition, all payments on the convertible notes will be blocked in the event of default in the payment on any senior indebtedness and may be blocked for up to 179 of 360 consecutive days in the event of certain non-payment defaults on senior indebtedness.

In the event of any distribution or payment of our or our subsidiaries' assets in any foreclosure, dissolution, winding-up, liquidation, reorganization or other bankruptcy proceeding, holders of secured indebtedness will have prior claim to those assets that constitute their collateral and holders of senior indebtedness will have a prior claim with respect to the remaining assets. We advise you that there may not be sufficient assets remaining to pay amounts due on any or all of the convertible notes then outstanding. Holders of the convertible notes will participate ratably with all holders of our unsecured subordinated indebtedness, and potentially with all of our other general creditors, based upon the respective amounts owed to each holder or creditor, in our remaining assets.

The convertible notes do not restrict our ability to incur additional debt or to take other actions that could negatively impact holders of the convertible notes.

We are not restricted under the terms of the indenture and the convertible notes from incurring additional indebtedness or securing any of our indebtedness. For example, we are negotiating a loan under the DOE ATVM Program and believe we will be permitted to borrow up to \$233 million under the ATVM Program, which would rank senior to the convertible notes. In addition, the convertible notes do not require us to achieve or maintain any minimum financial results relating to our financial position or results of operations. Our ability to recapitalize, incur additional debt, secure existing or future debt and take a number of other actions that are not limited by the terms of the indenture and the convertible notes could have the effect of diminishing our ability to make payments on the convertible notes when due. In addition, we are not restricted from repurchasing common stock or any indebtedness, including subordinated indebtedness, by the terms of the indenture and the convertible notes. If the underwriters exercise their option to purchase additional convertible notes, or if we issue other debt securities in the future, our debt service obligations will increase.

We may not be able to generate sufficient cash to service all of our indebtedness, including the convertible notes. Our ability to generate cash depends on many factors beyond our control. We may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make payments on, and to refinance, our indebtedness, including the convertible notes, and to fund planned capital expenditures, research and development efforts, working capital, acquisitions and other general corporate purposes depends on our ability to generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors, some of which are beyond our control. If we do not generate sufficient cash flow from operations or if future borrowings are not available to us in an amount sufficient to pay our indebtedness, including the convertible notes, or to fund our liquidity needs, we may be forced to:

refinance all or a portion of our indebtedness, including the convertible notes, on or before the maturity thereof;

sell assets;

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reduce or delay capital expenditures; or

seek to raise additional capital.

In addition, we may not be able to affect any of these actions on commercially reasonable terms or at all. Our ability to refinance this indebtedness will depend on our financial condition at the time, the restrictions in the instruments governing our indebtedness and other factors, including market conditions.

Our inability to generate sufficient cash flow to satisfy our debt service obligations, or to refinance or restructure our obligations on commercially reasonable terms or at all, would have an adverse effect, which could be material, on our business, financial condition and results of operations, as well as our ability to satisfy our obligations in respect of the convertible notes.

As a holder of convertible notes, you will not be entitled to any rights with respect to our common stock, but you will be subject to all changes made with respect to our common stock.

If you hold convertible notes, you will not be entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock), but you will be subject to all changes affecting our common stock. You will have rights with respect to our common stock only if you elect to convert your convertible notes and only as of the close of business on the conversion date.

We expect that the market value of the convertible notes will be significantly affected by the price of our common stock, which has been and may continue to be highly volatile.

Our common stock has experienced significant price and volume fluctuations. The market price of our common stock, as well as the general level of interest rates and our credit quality, will likely significantly affect the market price of the convertible notes. This may result in significantly greater volatility in the trading value of the convertible notes than would be expected for nonconvertible debt securities we may issue. We cannot predict whether the price of our common stock or interest rates will rise or fall. The market price of our common stock is highly volatile, and we expect it to continue to be volatile for the foreseeable future. For example, from September 24, 2009 through March 25, 2011, our common stock traded at a high price of \$28.20 and a low price of \$6.32. Some of the factors that may cause the market price of our common stock to continue to fluctuate include:

fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;

fluctuations in our recorded revenue, even during periods of significant sales order activity;

changes in estimates of our financial results or recommendations by securities analysts;

the timing of the shipment and/or installation and validation of our products;

failure of any of our products to achieve or maintain market acceptance;

failure of our suppliers, many of which are sole source suppliers, to deliver products in a timely fashion or at all or any other disruption or delay in our supply chain, including as described under " Additional Risks Related to Our Business" above;

product liability issues and warranty claims involving our products or our competitors' products;

changes in market valuations of similar companies;

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success of competitive products or technologies;

our customers' ability to achieve their planned production schedules;

changes in our capital structure, such as future issuances of securities or the incurrence of debt;

announcements by us or our competitors of significant services, contracts, investments, acquisitions or strategic alliances;

developments or announcements related to our application for government stimulus funds;

regulatory developments in the United States, foreign countries or both;

litigation involving us, our general industry or both, including the timing of the ruling of the Texas court in the December 2010 claim construction hearing related to our patent litigation with Hydro-Québec and the University of Texas;

additions or departures of key personnel;

investors' general perception of us; and

changes in general economic, industry and market conditions.

In addition, if the market for technology stocks or the stock market in general experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition or results of operations. If any of the foregoing occurs, it could cause our stock price to fall and may expose us to class action lawsuits that, even if unsuccessful, could be costly to defend and a distraction to management.

Our management will have broad discretion over the use of the proceeds we receive in this offering and the concurrent common stock offering, if any, and might not apply the proceeds in ways that increase the value of your investment.

Our management will have broad discretion to use our net proceeds from this offering and the concurrent common stock offering, if any, and you will be relying on the judgment of our management regarding the application of these proceeds. Our management might not apply our net proceeds of this offering and the concurrent common stock offering, if any, in ways that increase the value of your investment. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering or the concurrent common stock offering, if any.

The conversion rate of the convertible notes may not be adjusted for all dilutive events.

The conversion rate of the convertible notes is subject to adjustment for certain events, including, but not limited to, the issuance of stock dividends on our common stock, the issuance of certain rights or warrants, subdivisions, combinations, distributions of capital stock, indebtedness or assets, cash dividends and certain issuer tender or exchange offers as described under "Description of the Convertible Notes Conversion of Convertible Notes Conversion Rate Adjustments." Such conversion rate will not be adjusted, however, for other events, such as a third-party tender or exchange offer or an issuance of common stock for cash, that may adversely affect the trading price of the convertible notes or our common stock. In addition, an event that adversely affects the value of the convertible notes may occur, and that event may not result in an adjustment to such conversion rate.

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We may not have the ability to raise the funds necessary to repurchase the convertible notes upon a fundamental change as required by the indenture governing the convertible notes.

Holders may require us to repurchase their convertible notes upon a fundamental change as described under "Description of the Convertible Notes Repurchase of Convertible Notes at Your Option upon a Fundamental Change." A fundamental change may also constitute an event of default, and result in the effective acceleration of the maturity of our then-existing indebtedness. There can be no assurance that we would have sufficient financial resources, or would be able to arrange financing, to pay the fundamental change repurchase price for the convertible notes surrendered by the holders in cash. Further, any future indebtedness documents may contain provisions prohibiting repurchase of the convertible notes under some circumstances or expressly prohibiting our repurchase of the convertible notes upon a fundamental change. In addition, existing indebtedness documents, including our term loan and security agreement with Silicon Valley Bank and Gold Hill Venture Lending 03, L.P. and our forgivable loan agreement with Massachusetts Clean Energy Technology Center, contain, and any future indebtedness documents may contain, provisions providing that a fundamental change constitutes an event of default under that agreement. If a fundamental change occurs at a time when we are prohibited from repurchasing convertible notes, we could seek the consent of our lenders to repurchase the convertible notes or attempt to refinance this debt. If we do not obtain any required consent, we would not be permitted to repurchase the convertible notes. Our failure to repurchase surrendered convertible notes would constitute an event of default under the indenture, which could constitute an event of default under our senior indebtedness then outstanding, if any, and might constitute a default under the terms of our other indebtedness then outstanding, if any.

Some significant restructuring transactions may not constitute a fundamental change, in which case we would not be obligated to offer to repurchase the convertible notes.

Upon the occurrence of certain fundamental change transactions described under "Description of the Convertible Notes," you have the right to require us to repurchase your convertible notes. However, the fundamental change provisions will only afford protection to holders of convertible notes in the event of certain transactions. For example, we will not be required to repurchase any convertible notes upon the occurrence of a transaction that would otherwise constitute a fundamental change or in connection with certain types of transactions that would otherwise constitute a fundamental change if more than 90% of the consideration in the transaction consists of shares of common stock traded on the New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any successor thereto). Furthermore, certain other transactions such as leveraged recapitalizations, refinancings, restructurings or certain acquisitions of other entities by us or our subsidiaries would not constitute a fundamental change requiring us to repurchase the convertible notes or to increase the conversion rate.

In the event of any such transaction, the holders would not have the right to require us to repurchase the convertible notes, even though each of these transactions could increase the amount of our indebtedness or otherwise adversely affect our capital structure or any credit ratings, thereby adversely affecting the holders of convertible notes.

The adjustment to the applicable conversion rate for convertible notes converted in connection with a specified corporate transaction may not adequately compensate you for any lost value of your convertible notes as a result of such transaction.

If a specified corporate transaction constituting a make whole adjustment event, as described under "Description of the Convertible Notes," occurs, under certain circumstances

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we will increase the applicable conversion rate by a number of additional shares of our common stock for convertible notes converted in connection with such specified corporate transaction. The increase in the applicable conversion rate will be determined based on the date on which the specified corporate transaction becomes effective and the price paid per share of our common stock in, or the price of our common stock over a ten trading-day period immediately preceding the effective date of, such transaction, as described under "Description of the Convertible Notes Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event." The adjustment to the applicable conversion rate for convertible notes converted in connection with a specified corporate transaction may not adequately compensate you for any lost value of your convertible notes as a result of such transaction. In addition, if the stock price for such transaction (determined as described under "Description of the Convertible Notes Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event") is greater than \$ per share, or if such price is less than \$ per share (each such price, subject to adjustment), no adjustment will be made to the applicable conversion rate. Our obligation to increase the applicable conversion rate in connection with any such specified corporate transaction could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness of economic remedies.

We may issue additional shares of common stock or instruments convertible into common stock, including in connection with conversions of convertible notes, and thereby materially and adversely affect the price of the common stock.

Subject to lock-up provisions that apply for the first 90 days after the original issuance date of the convertible notes, we are not restricted from issuing additional common stock or other instruments convertible into common stock during the life of the convertible notes. If we issue additional shares of common stock or instruments convertible into common stock, it may materially and adversely affect the price of the common stock and, in turn, the price of the convertible notes. In addition, the conversion of some or all of the convertible notes may dilute the ownership interests of existing stockholders, and any sales in the public market of any shares of common stock issuable upon such conversion could adversely affect prevailing market prices of the common stock. In addition, the anticipated conversion of the convertible notes into shares of common stock or a combination of cash and shares of common stock could depress the price of the common stock.

Your ability to transfer the convertible notes may be limited by the absence of an active trading market, and there is no assurance that any active trading market will develop for the convertible notes.

The convertible notes are a new issue of securities for which there is no established trading market. We do not intend to apply for listing of the convertible notes on any securities exchange or arrange for the convertible notes to be quoted on any quotations system. The underwriters may make a market in the convertible notes as permitted by applicable laws and regulations; however, the underwriters are not obligated to make a market in the convertible notes, and they may discontinue their market-making activities at any time without notice. Therefore, an active market for the convertible notes may not develop or, if developed, may not continue. The liquidity of any market for the convertible notes will depend upon the number of holders of the convertible notes, our performance, the market for similar securities, the interest of securities dealers in making a market in the convertible notes and other factors. A liquid trading market may not develop for the convertible notes. If a market develops, the convertible notes could trade at prices that may be lower than the initial offering price of the

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convertible notes. If an active market does not develop or is not maintained, the price and liquidity of the convertible notes may be adversely affected.

Recent regulatory actions may adversely affect the trading price and liquidity of the convertible notes.

We expect that many investors in, and potential purchasers of, the convertible notes will employ, or seek to employ, a convertible arbitrage strategy with respect to the convertible notes. Investors that employ a convertible arbitrage strategy with respect to convertible debt instruments typically implement that strategy by selling short the common stock underlying the convertible notes or by entering into cash-settled over-the-counter derivative transactions with respect to our common stock that have the same economic effect as a short sale of our common stock. As a result, any specific rules regulating short selling of securities or other governmental action that interferes with the ability of market participants to effect short sales in our common stock could adversely affect the ability of investors in, or potential purchasers of, the convertible notes to conduct the convertible arbitrage strategy that we believe they will employ, or seek to employ, with respect to the convertible notes. This could, in turn, adversely affect the trading price and liquidity of the convertible notes.

On May 10, 2010, amendments to Rule 201 of Regulation SHO of the Securities Exchange Act of 1934, as amended, or the Exchange Act, to implement a new short sale price test became effective. The Rule 201 amendments restrict the short selling of any "covered security" that triggers a circuit breaker by falling at least 10% in one day, at which point short sale orders can be displayed or executed only if the order price is above the current national best bid, subject to certain limited exceptions. Compliance with the amendments to Rule 201 was required after February 28, 2011. Because our common stock is a "covered security," the new restrictions may interfere with the ability of investors in, and potential purchasers of, the convertible notes, to effect short sales in our common stock and to conduct the convertible arbitrage strategy that we believe they will employ, or seek to employ, with respect to the convertible notes.

On September 10, 2010, the SEC approved amendments to Financial Industry Regulatory Authority, or FINRA, Rule 11892 (Clearly Erroneous Transactions in Exchange-Listed Securities) and corresponding exchange rules that are intended to clarify the process for reviewing potentially erroneous trades in exchange-listed securities. These amendments, which are effective on a pilot basis until April 11, 2011, were intended to provide for uniform treatment of clearly erroneous transaction reviews of (i) multi-stock events involving 20 or more securities and (ii) transactions that trigger an individual stock trading pause by a primary listing market and subsequent transactions that occur before the trading halt is in effect for over-the-counter trading. Moreover, in a speech given on September 22, 2010, before the Security Traders Association, Mary Schapiro, Chairman of the SEC, stated that the SEC will likely go further than these recently enacted circuit breaker regulations and that one possible alternative currently under discussion is a "limit-up/limit-down" system under which trading parameters would be established and trades would have to be executed within a range tied to the national best bid and offer. Both the rule changes already approved by the SEC and any future proposed rule changes, to the extent such rule changes apply to our common stock, may decrease, or prevent an increase in, the market price and/or liquidity of our common stock and/or interfere with the ability of investors in, and potential purchasers of, the convertible notes to effect hedging transactions in or relating to our common stock and to conduct the convertible arbitrage strategy that we believe they will employ, or will seek to employ, with respect to the convertible notes.

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On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was enacted. This new legislation may require many over-the-counter swaps to be centrally cleared through regulated clearinghouses and traded on exchanges or comparable trading facilities. In addition, swap dealers and major market participants may be required to comply with margin and capital requirements as well as public reporting requirements to provide transaction and pricing data on both cleared and uncleared swaps. These requirements could adversely affect the ability of investors in, or potential purchasers of, the convertible notes to implement a convertible arbitrage strategy with respect to the convertible notes (including increasing the costs incurred by such investors in implementing such strategy). This could, in turn, adversely affect the trading price and liquidity of the convertible notes. The legislation will become effective on the later of 360 days following the enactment of the legislation or 60 days after the publication of the final rule. However, it is unclear whether the margin requirements will apply retroactively to existing swap transactions. In addition, on December 15, 2010, the SEC released proposed rules relating to the mandatory clearing of security-based swaps and the end-user exception to mandatory clearing of security-based swaps (pursuant to which certain non-financial end-users will be exempt from the central execution and clearing requirements). We cannot predict how this legislation will be implemented by the SEC or the magnitude of the effect that this legislation will have on the trading price or liquidity of the convertible notes.

Past regulatory actions have had a significant impact on the trading prices and liquidity of convertible debt instruments. For example, in September 2008, the SEC issued emergency orders generally prohibiting short sales of the common stock of a variety of financial services companies while Congress worked to provide a comprehensive legislative plan to stabilize the credit and capital markets. The orders made the convertible arbitrage strategy that many convertible debt investors employ difficult to execute and adversely affected both the liquidity and trading price of convertible debt instruments issued by many of the financial services companies subject to the prohibition. Any governmental action that similarly restricts the ability of investors in, or potential purchasers of, the convertible notes to effect short sales of our common stock, including the recently adopted amendments to Regulation SHO, FINRA and exchange rule changes and the implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act, could similarly adversely affect the trading price and the liquidity of the convertible notes.

You may be subject to tax upon an adjustment to, or a failure to adjust, the conversion rate of the convertible notes even though you do not receive a corresponding cash distribution.

The conversion rate of the convertible notes is subject to adjustment in certain circumstances, including the payment of certain cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, you may be deemed to have received for U.S. federal income tax purposes a taxable dividend to the extent of our earnings and profits without the receipt of any cash. In addition, a failure to adjust (or adjust adequately) the conversion rate after an event that increases your proportionate interest in us could be treated as a deemed taxable dividend to you. Such deemed dividend may be subject to U.S. federal withholding tax or backup withholding, which may be set off against subsequent payments on the convertible notes. See "Description of the Convertible Notes Conversion of Convertible Notes Conversion Rate Adjustments" and "Certain Material U.S. Federal Income Tax Considerations."

If a make whole adjustment event occurs on or prior to the maturity date of the convertible notes, under some circumstances, we will increase the conversion rate for convertible notes converted in connection with such make whole adjustment event. Such

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increase may be treated as a distribution subject to U.S. federal income tax as a dividend. See "Certain Material U.S. Federal Income Tax Considerations."

Provisions in the indenture governing the convertible notes could discourage potential acquisition proposals and could deter or prevent a change in control.

If a "fundamental change" occurs, holders of the convertible notes will have the right, at their option, to require us to repurchase all or a portion of their convertible notes. In the event of a "make whole adjustment event," we also may be required to increase the conversion rate applicable to convertible notes surrendered for conversion in connection with such make whole adjustment event. In addition, the indenture governing the convertible notes prohibits us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the convertible notes. These provisions in the indenture governing the convertible notes, along with certain of the provisions of our restated certificate of incorporation, our amended and restated bylaws and Delaware law described in "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2010 filed with the SEC, may have the effect of delaying, deferring or preventing a change in control. These provisions may make it more difficult for other persons, without the approval of our board of directors or a committee thereof, to make a tender offer or otherwise acquire substantial amounts of our common stock or to launch other takeover attempts that a stockholder might consider to be in such stockholder's best interest. These provisions could limit the price that some investors might be willing to pay in the future for shares of our common stock.

An adverse rating of the convertible notes may cause their trading price to fall.

We do not intend to seek a rating for the convertible notes, but if a rating agency rates the convertible notes, it may assign a rating that is lower than expected by investors. Ratings agencies also may lower ratings on the convertible notes in the future. If rating agencies assign a lower-than-expected rating or reduce, or indicate that they may reduce, their ratings in the future, the trading price of the convertible notes could significantly decline.

We do not intend to pay cash dividends on our common stock in the foreseeable future.

We currently intend to continue our policy of retaining earnings to finance the growth of our business. As a result, we do not anticipate paying cash dividends on our common stock in the foreseeable future. Because we do not anticipate paying cash dividends for the foreseeable future, holders who convert their convertible notes and receive shares of our common stock will not realize a return on their investment unless the trading price of our common stock appreciates, which we cannot assure.

Table of Contents**USE OF PROCEEDS**

The net proceeds from the sale of the convertible notes offered hereby are estimated to be approximately \$117.1 million (approximately \$135.3 million if the underwriters for this convertible notes offering exercise in full their option to purchase additional convertible notes), after deducting the estimated underwriting discounts and commissions and offering expenses. In addition, we estimate that the net proceeds from the concurrent common stock offering, after deducting the estimated underwriting discounts and commissions and offering expenses, will be approximately \$130.1 million (or approximately \$150.0 million if the underwriters for the common stock offering exercise in full their option to purchase additional shares of common stock). However, this offering is not contingent on the concurrent common stock offering and we cannot assure you that we will complete the concurrent common stock offering. See "Concurrent Common Stock Offering."

We intend to use the net proceeds from this convertible notes offering for general corporate purposes. Pending these uses, we intend to invest the net proceeds of this convertible notes offering in interest-bearing investment-grade securities.

The foregoing represents our intentions based upon our present plans and business conditions. The occurrence of unforeseen events or changed business conditions, however, could result in the application of the proceeds from this convertible notes offering in a manner other than as described in this prospectus supplement.

PRICE RANGE OF COMMON STOCK

Our common stock is listed on The NASDAQ Global Select Market and trades under the symbol "AONE." The following table sets forth, for the quarterly periods indicated, the high and low sale price per share of the common stock as reported on The NASDAQ Global Select Market:

	High	Low
2009		
Third Quarter (from initial public offering on September 24, 2009)	\$ 22.10	\$ 16.56
Fourth Quarter	28.20	14.31
2010		
First Quarter	\$ 23.39	\$ 13.24
Second Quarter	14.96	7.50
Third Quarter	11.53	6.32
Fourth Quarter	10.42	7.63
2011		
First Quarter (through March 25, 2011)	\$ 10.99	\$ 7.55

On March 25, 2011, the last reported sale price of our common stock was \$7.76 per share. On March 25, 2011, we had 175 holders of record of our common stock.

DIVIDEND POLICY

We have not declared or paid any cash dividends on our common stock since our inception and do not expect to pay any cash dividends for the foreseeable future. Our term loan and security agreement with Silicon Valley Bank and Gold Hill Venture Lending 03, L.P. restricts our ability to pay cash dividends.

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CONSOLIDATED RATIOS OF EARNINGS TO FIXED CHARGES

We recorded a net loss from continuing operations for each of the five years in the period ended December 31, 2010. As a result, earnings were insufficient to cover fixed charges by \$151.1 million for the fiscal year ended December 31, 2010, \$86.3 million for the fiscal year ended December 31, 2009, \$80.2 million for the fiscal year ended December 31, 2008, \$30.9 million for the fiscal year ended December 31, 2007 and \$15.7 million for the fiscal year ended December 31, 2006.

For the purpose of these computations, we have calculated earnings as the sum of pretax loss from continuing operations before loss from equity investees and fixed charges. Fixed charges consist of interest expense and the interest portion of rent expense which is deemed to be representative of the interest factor.

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Table of Contents**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2010:

on an actual basis;

on an as adjusted basis to give effect to the issuance and sale of \$125,000,000 aggregate principal amount of convertible notes in this offering, after deducting the estimated underwriting discounts and commissions and offering expenses (assuming no exercise of the underwriters' option to purchase additional convertible notes); and

on a further adjusted basis to give effect to the issuance and sale of 18,000,000 shares of our common stock in the concurrent common stock offering at an assumed public offering price of \$7.76 per share (which was the last sale price of our common stock on March 25, 2011 reported on The Nasdaq Global Select Market), after deducting the estimated underwriting discounts and commissions and offering expenses (assuming no exercise of the underwriters' option to purchase additional shares).

This table should be read in conjunction with our consolidated financial statements and related notes incorporated by reference in this prospectus supplement. See "Where You Can Find More Information" and "Incorporation by Reference."

As of December 31, 2010
As As Further
Actual Adjusted Adjusted
(in thousands, except share
and per share data)

Cash and cash equivalents	\$ 216,814	\$ 333,939	\$ 464,048
Debt:			
Total long-term debt, including current portion	9,982	9,982	9,982
Convertible notes (1)		117,125	117,125
Total debt	9,982	127,107	127,107
Stockholders' equity (deficit):			
Preferred stock, par value \$0.001 per share 5,000,000 shares authorized; no shares issued or outstanding			
Common stock, par value \$0.001 per share 250,000,000 shares authorized; 105,194,073 shares issued and outstanding, actual and as adjusted and 123,194,073 shares issued and outstanding, as further adjusted	105	105	123
Additional paid-in capital	790,256	790,256	920,347
Accumulated deficit	(391,228)	(391,228)	(391,228)
Total A123 Systems stockholders' equity	398,198	398,198	528,307
Noncontrolling interest	334	334	334
Total stockholders' equity	398,532	398,532	528,641
Total capitalization	\$ 408,514	\$ 525,639	\$ 655,748

(1)

The convertible notes to be issued in connection with this offering have been included in long-term debt pending determination of the terms of this offering, at which time a portion of such convertible notes may be included in additional paid-in capital. There may be features within the terms which are considered to be an embedded derivative and could be recorded on the balance sheet at fair value as a liability. If it is determined to be an embedded derivative, we will be required to recognize changes in the derivative's fair value from period to period in other income (expense) in our statements of operations.

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CONCURRENT COMMON STOCK OFFERING

Concurrently with this convertible notes offering, we are offering 18,000,000 shares of our common stock (or a total of 20,700,000 shares of our common stock if the underwriters for the common stock offering exercise in full their option to purchase additional shares) pursuant to a separate prospectus supplement. This convertible notes offering is not contingent upon the common stock offering, and the common stock offering is not contingent upon this convertible notes offering. We expect to raise approximately \$247.2 million in aggregate net proceeds from the two offerings. However, amounts sold in each offering may increase or decrease based on market conditions relating to a particular security. We cannot assure you that we will complete the concurrent common stock offering.

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DESCRIPTION OF THE CONVERTIBLE NOTES

We will issue the convertible notes under a subordinated debt securities indenture, which is expected to be dated as of April , 2011, between us and U.S. Bank National Association, as trustee. We refer to this indenture, as supplemented and modified by a supplemental indenture, to be dated as of the date of the initial issuance of the convertible notes between the Company and the trustee, as the "indenture." You may request a copy of the indenture at our address shown under "Where You Can Find More Information."

The following summarizes some, but not all, of the provisions of the convertible notes and the indenture, but does not purport to be complete and is qualified by reference to all the provisions of the convertible notes and the indenture, including the definitions of certain terms used in those documents. The terms of the convertible notes include those expressly set forth in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act, and we urge you to read the indenture and the form of certificate evidencing the convertible notes in their entirety, because they, and not this description, define your rights as a holder of the convertible notes.

This description of the convertible notes supplements and, to the extent it is inconsistent, replaces the description of the general provisions of our debt securities in the accompanying prospectus.

In this "Description of the Convertible Notes" section, when we refer to "A123," "we," "our" or "us," we are referring to A123 Systems, Inc. and not to any of its subsidiaries.

General

We are offering \$125,000,000 (or \$143,750,000 if the underwriters exercise in full their option to purchase additional convertible notes) aggregate principal amount of the convertible notes. We will settle conversions of convertible notes by delivering shares of our common stock as described below under " Conversion of Convertible Notes Settlement upon Conversion." The convertible notes will be issued only in denominations of \$1,000 and in integral multiples of \$1,000. The convertible notes will mature on April 15, 2016, unless earlier converted by you or repurchased by us at your option as described below.

The convertible notes will be our general unsecured subordinated obligations, will be subordinated to all of our present and future senior indebtedness, will be subordinated to all of our future senior subordinated indebtedness and will rank equally with all of our future subordinated indebtedness as described under " Subordination of the Convertible Notes" below. The convertible notes will be structurally subordinated to all present and future debt and other obligations of our subsidiaries. In addition, the convertible notes are effectively subordinated to all of our present and future secured debt to the extent of the value of the collateral securing that debt.

Neither we nor our subsidiaries are restricted from paying dividends, incurring debt or issuing or repurchasing our securities under the indenture. In addition, there are no financial covenants in the indenture. You are not protected under the indenture in the event of a highly leveraged transaction, a change in control of A123 or a termination in the trading of our common stock, except to the extent described under " Repurchase of Convertible Notes at Your Option upon a Fundamental Change" and " Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event."

We will pay interest on the convertible notes at a rate of % per annum, payable semiannually in arrears on April 15 and October 15 of each year (each, an "interest payment date"), commencing on October 15, 2011, to holders of record at 5:00 p.m., New York City

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time (the "close of business"), on the preceding April 1 and October 1 (each, a "regular record date"), respectively. Interest will be computed on the basis of a 360-day year composed of twelve 30-day months. In the event of any convertible notes' maturity or conversion or repurchase by us at the option of the holder thereof, interest will cease to accrue on the convertible notes under the terms of, and subject to the conditions of, the indenture. We will, however, pay accrued and unpaid interest on the maturity date to holders of record of the convertible notes on the regular record date immediately preceding the maturity date regardless of whether such convertible notes are converted after such regular record date and prior to the maturity date.

If any interest payment date, the maturity date or any fundamental change repurchase date of a convertible note falls on a day that is not a business day, the required payment will be made on the next succeeding business day and no interest on such payment will accrue in respect of the delay. A "business day" is any day other than (x) a Saturday, (y) a Sunday or (z) a day on which state or federally chartered banking institutions in New York, New York are not required to be open.

Unless the context otherwise requires, all references to interest in this prospectus supplement include additional interest, if any, payable at our election as the sole remedy relating to the failure to comply with our reporting obligations as described under " Events of Default."

We may, without the consent of the holders, issue additional convertible notes under the indenture with the same terms and with the same CUSIP numbers as the convertible notes offered hereby in an unlimited aggregate principal amount; *provided* that such additional convertible notes must be fungible with the convertible notes offered hereby for federal income tax purposes. The convertible notes offered hereby and any such additional convertible notes would be treated as a single class for all purposes under the indenture and would vote together as one class on all matters with respect to the convertible notes. We may also from time to time purchase the convertible notes in open-market purchases or negotiated transactions or under the other circumstances described under " Repurchase and Cancellation," in each case without prior notice to or the consent of holders.

We will maintain an office in New York, New York where the convertible notes may be presented for registration of transfer, exchange, repurchase or conversion. This office will initially be an office or agency of the trustee. Except under the limited circumstances described below, the convertible notes will be issued only in fully-registered book-entry form, without interest coupons, and will be represented by one or more global notes. There will be no service charge for any registration of transfer or exchange of convertible notes. We or the trustee may, however, require holders to pay a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange in which the tax is due because the holder requests that the convertible notes to be issued in such transfer or exchange be registered in a name other than the holder's name.

No Redemption

The convertible notes will not be redeemable prior to the maturity date. No "sinking fund" is provided for the convertible notes, which means that we are not required to redeem or retire the convertible notes periodically.

Subordination of the Convertible Notes

The payment of principal and any interest amount on the convertible notes is subordinated to the prior payment in full, in cash or other payment satisfactory to the holders

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of all existing and future senior indebtedness and all future senior subordinated indebtedness. If we dissolve, wind-up, liquidate or reorganize, or if we are the subject of any bankruptcy, insolvency, receivership or similar proceedings, we will pay the holders of senior indebtedness (whether outstanding on the date of the indenture or thereafter incurred) in full in cash before we make payments to the holders of the convertible notes. If the convertible notes are accelerated because of an event of default under the indenture, we must pay the holders of senior indebtedness in full all amounts due and owing thereunder before we make payments to the holders of the convertible notes. The indenture will require that we must promptly notify holders of senior indebtedness if payment of the convertible notes is accelerated because of an event of default under the indenture.

We may not make any payment on the convertible notes or purchase or otherwise acquire the convertible notes (except (i) if we repurchase convertible notes in the open market, (ii) in the event of a satisfaction and discharge of the indenture, payment by the trustee of monies held in trust by it to be applied to payment to holders of the convertible notes or (iii) payments of cash in lieu of fractional shares upon conversion as described below) if:

a default in the payment of any senior indebtedness occurs and is continuing beyond any applicable period of grace set forth in the agreement, senior indenture or other document governing such senior indebtedness, or

any other default on designated senior indebtedness (a "nonpayment default") occurs and is continuing that permits holders of a class of designated senior indebtedness to accelerate its maturity and the trustee receives a notice of such default (a "payment blockage notice") from us or any other person permitted to give such notice under the indenture (including the holders of such class of designated senior indebtedness or their agent or representative).

We are required to resume payments on the convertible notes:

in case of a payment default of senior indebtedness, upon the date on which such default is cured or waived or ceases to exist, and

in case of a nonpayment default, the earlier of the date on which such nonpayment default is cured or waived or ceases to exist or 179 days after the date on which the payment blockage notice is received (unless the maturity of any designated senior indebtedness has been accelerated).

No new payment blockage notice may be delivered by a class of designated senior indebtedness in respect of a nonpayment default unless and until at least 90 days have elapsed during which no payment blockage was in effect with respect to that class of designated senior indebtedness and in no event shall more than two payment blockage notices from any single class of designated senior indebtedness become effective during any 360 day period.

No nonpayment default that existed or was continuing on the date of delivery of any payment blockage notice shall be the basis for a subsequent payment blockage notice, unless such default shall have been cured or waived for a period of not less than 180 days.

As a result of these subordination provisions, in the event of our bankruptcy, dissolution or reorganization, holders of senior indebtedness may receive more, ratably, and holders of the convertible notes may receive less, ratably, than our other creditors. These subordination provisions will not prevent the occurrence of any event of default under the indenture. The indenture will provide that the subordination provisions cannot be amended without the written consent of holders of our senior indebtedness.

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The convertible notes are exclusively the obligation of A123. However, a portion of our operations is or in the future may be conducted through our subsidiaries. As a result, our cash flow and our ability to service our debt, including the convertible notes, may depend upon the earnings of our subsidiaries. In addition, we would be dependent on the distribution of earnings, loans or other payments by our subsidiaries to us. Our subsidiaries are separate and distinct legal entities, and have no obligation to pay any amounts due on the convertible notes or to provide us with funds for our payment obligations, whether by dividends, distributions, loans or other payments. In addition, any payment of dividends, distributions, loans or advances by our subsidiaries will also be contingent upon our subsidiaries' earnings and could be subject to contractual or statutory restrictions. Furthermore, our right to receive any assets of any of our subsidiaries upon their liquidation or reorganization, and therefore the consequent right of the holders of the convertible notes to participate in those assets, will be structurally subordinated to the claims of that subsidiary's creditors, including trade creditors. In addition, even if we were a creditor of any of our subsidiaries, our rights as a creditor would be subordinate to any security interest in the assets of our subsidiaries and any indebtedness of our subsidiaries senior to that held by us.

As of December 31, 2010, we had approximately \$10.0 million of senior indebtedness outstanding. Neither we nor our subsidiaries are limited from incurring senior indebtedness or additional debt under the indenture. If we incur additional debt, our ability to pay our obligations on the convertible notes could be affected. We expect from time to time to incur additional indebtedness and other liabilities. We expect the amount of any direct loans we are permitted to borrow under the Department of Energy's Advanced Technology Vehicles Manufacturing Loan Program, or ATVM Program, will be senior indebtedness. Based on the amount of our grant award under the Department of Energy Battery Initiative and the guidelines associated with the ATVM Program, we believe we will be permitted to borrow up to \$233 million of senior indebtedness under the ATVM Program.

If either the trustee or any holder of convertible notes receives any payment or distribution of our assets in contravention of these subordination provisions before all senior indebtedness is paid in full, whether in cash, property or securities and including without limitation by way of set-off, at a time when the payment is prohibited by the subordination provisions of the indenture, then the recipient will hold such payment or distribution in trust for the benefit of holders of senior indebtedness to the extent necessary to make payment in full of all senior indebtedness remaining unpaid.

For purposes of these provisions:

"designated senior indebtedness" means any senior indebtedness in which the instrument creating or evidencing the indebtedness, or any related agreements or documents to which we are a party, expressly provides that such indebtedness is "designated senior indebtedness" for purposes of the indenture (*provided* that the instrument, agreement or other document may place limitations and conditions on the right of the senior indebtedness to exercise the rights of designated senior indebtedness). A "class of designated senior indebtedness" means any designated senior indebtedness the principal amount of which is \$20.0 million or more that has been designated as a separate class from any other designated senior indebtedness, and, with respect to designated senior indebtedness that has not been designated as a separate class, shall mean all such designated senior indebtedness the principal amount of which, in the aggregate, is \$20.0 million or more, acting as a single class.

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"indebtedness" means:

- (1) all of our indebtedness, obligations and other liabilities, contingent or otherwise,
 - (A) for borrowed money, including overdrafts and any loans or advances from banks, whether or not evidenced by notes or similar instruments, or
 - (B) evidenced by credit or loan agreements, bonds, debentures, notes or similar instruments, whether or not the recourse of the lender is to the whole of the assets of A123 or to only a portion thereof, other than any account payable or other accrued current liability or obligation incurred in the ordinary course of business in connection with the obtaining of materials or services;
- (2) all of our reimbursement obligations and other liabilities, contingent or otherwise, with respect to letters of credit, bank guarantees or bankers' acceptances;
- (3) all of our obligations and liabilities, contingent or otherwise, in respect of leases required to be accounted for as capitalized lease obligations on our balance sheet in conformity with generally accepted accounting principles;
- (4) all of our obligations and other liabilities, contingent or otherwise, under any lease or related document, including a purchase agreement, conditional sale or other title retention agreement, in connection with the lease of real property or improvements thereon (or any personal property included as part of any such lease) which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property or pay an agreed upon residual value of the leased property, including our obligations under such lease or related document to purchase or cause a third party to purchase such leased property or pay an agreed upon residual value of the leased property to the lessor;
- (5) the deferred and unpaid balance of the purchase price of any property, except any such balance that constitutes an accrued expense or trade or service payable incurred in the ordinary course of business;
- (6) all of our obligations, contingent or otherwise, with respect to an interest rate or other swap, cap, floor or collar agreement or hedge agreement, forward contract or other similar instrument or agreement, foreign currency hedge, exchange, purchase or similar instrument or agreement or commodity swaps or options, forward commodity contracts or similar instrument or agreement;
- (7) all of our direct or indirect guaranties or similar agreements by us in respect of, and all of our obligations or liabilities to purchase or otherwise acquire or otherwise assure a creditor against loss in respect of, indebtedness, obligations or liabilities of another person of the kinds described in clauses (1) through (6); and
- (8) any and all deferrals, renewals, extensions, refinancings and refundings of, or amendments, modifications or supplements to, any indebtedness, obligation or liability of the kinds described in clauses (1) through (7);

"senior indebtedness" means the principal of, interest, including any interest accruing after the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowed as a claim in the proceeding, and rent payable on or in connection with, premium on and all fees, costs, expenses and other amounts accrued or due on or in connection with, indebtedness of A123, whether secured or unsecured, absolute or contingent, due or to become due, outstanding on the date of

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the indenture or thereafter created, incurred, assumed, guaranteed or in effect guaranteed by A123, including all deferrals, renewals, extensions or refundings of, or amendments, modifications or supplements to, the foregoing. However, senior indebtedness does not include:

- (1) indebtedness that expressly provides that such indebtedness shall not be senior in right of payment to the convertible notes or expressly provides that such indebtedness is equal in rank or junior to the convertible notes;
- (2) any indebtedness to any of our majority-owned subsidiaries, other than indebtedness to our subsidiaries arising by reason of guarantees by us of indebtedness of such subsidiary to a person that is not our subsidiary;
- (3) indebtedness for accrued expenses or trade or service payables incurred in the ordinary course of business; and
- (4) any liability for federal, state, local or other taxes owing or owed by us.

Conversion of Convertible Notes

General

At any time prior to the close of business on the third business day immediately preceding the maturity date, you may convert your convertible notes at an initial conversion rate of _____ shares of our common stock for each \$1,000 principal amount of convertible notes (equivalent to an initial conversion price of approximately _____ per share of our common stock). The conversion rate and the corresponding conversion price in effect at any given time will be subject to adjustment as described below under " Conversion Rate Adjustments" and " Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event." The conversion price of a note in effect at any given time is equal to \$1,000, *divided by* the conversion rate in effect at such time. Accordingly, an adjustment to the conversion rate will result in a corresponding (but inverse) adjustment to the conversion price. A holder may convert fewer than all of such holder's convertible notes so long as the convertible notes being converted are an integral multiple of \$1,000 principal amount.

Upon conversion the holder will receive the consideration described below under " Settlement upon Conversion."

Upon conversion of a convertible note, the converting holder will not receive any additional cash payment for accrued and unpaid interest, if any, except as set forth in the following paragraph. We will not adjust the conversion rate to account for accrued and unpaid interest, except that we will pay on the maturity date accrued and unpaid interest to holders of record at the close of business on the regular record date immediately preceding the maturity date regardless of whether such holders convert their convertible notes. Our settlement of conversions as described below under " Settlement upon Conversion" will be deemed to satisfy our obligation to pay the principal amount of the note and accrued and unpaid interest, if any, to, but not including, the conversion date. Accordingly, accrued and unpaid interest, if any, to, but not including, the conversion date will be deemed to be paid in full upon conversion of the convertible notes into shares of our common stock, rather than cancelled, extinguished or forfeited.

Holders of convertible notes at the close of business on any regular record date will receive the interest payable on the corresponding interest payment date notwithstanding the conversion of such convertible notes at any time after the close of business on such regular record date. Convertible notes surrendered for conversion by a holder after the close of

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business on any regular record date but prior to 9:00 a.m., New York City time (the "open of business"), on the next interest payment date must be accompanied by payment of an amount equal to the interest that will be payable on the convertible notes; provided, however, that no such payment need be made:

if we have specified a fundamental change repurchase date that is after such regular record date and on or prior to the corresponding interest payment date;

with respect to any convertible notes surrendered for conversion following the regular record date immediately preceding the maturity date; or

to the extent of overdue interest, if any overdue interest exists at the time of conversion with respect to such note.

Conversion Procedures

Holders may convert their convertible notes only in denominations of \$1,000 principal amount and integral multiples thereof.

The right of conversion attaching to any note may be exercised (a) if such note is represented by a global note, through compliance with the then applicable conversion procedures of the Depositary Trust Company, or DTC, or any successor depositary or (b) if such note is represented by a certificated security, by delivery of such note at the specified office of the conversion agent, accompanied by a duly signed and completed irrevocable notice of conversion and appropriate endorsements and transfer documents if required by the conversion agent. If a holder converts convertible notes, we will pay any documentary, stamp or similar issue or transfer tax due on the issuance of the shares of our common stock upon the conversion of the convertible notes, unless the tax is due because the holder requests any shares to be issued in a name other than the holder's name, in which case the holder will pay the tax.

If you have submitted your convertible notes for repurchase upon a fundamental change, you may only convert your convertible notes if you withdraw your repurchase exercise notice (as defined below) prior to the fundamental change repurchase date, as described below under "Repurchase of Convertible Notes at Your Option upon a Fundamental Change." If your convertible notes are submitted for repurchase upon a fundamental change, your right to withdraw your repurchase exercise notice and convert the convertible notes that are subject to repurchase will terminate at the close of business on the second business day immediately preceding the relevant fundamental change repurchase date.

The "closing sales price" of our common stock on any date means the closing per share sales price (or, if no closing sales price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on such date as reported in composite transactions for the principal U.S. national or regional securities exchange on which our common stock is traded or, if our common stock is not listed on a U.S. national or regional securities exchange, as reported by Pink OTC Markets Inc. or a similar organization. If our common stock is not so quoted, the "closing sales price" will be the average of the mid-point of the last bid and ask prices for our common stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by us for this purpose. The closing sales price will be determined without reference to after-hours or extended market trading.

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A "trading day" means a day on which (i) trading in our common stock generally occurs on the Nasdaq Global Select Market or, if our common stock is not listed on the Nasdaq Global Select Market, on the principal other U.S. national or regional securities exchange or trading system on which our common stock is then listed or quoted, and (ii) a closing sales price for our common stock is available on such securities exchange or trading system. If our common stock is not so listed or quoted, "trading day" means a "business day."

Settlement upon Conversion

Upon conversion of convertible notes, we will deliver to holders, in full satisfaction of our conversion obligation, shares of our common stock, together with cash in lieu of any fractional share as described below.

Each conversion of convertible notes will be deemed to have been effected on the relevant conversion date, and with respect to the shares of common stock that are issuable upon such conversion, the person in whose name the certificate or certificates for such shares will be registered will become the holder of record of such shares as of the close of business on the conversion date.

The number of shares of common stock due to the converting holder upon conversion will be a number of shares of our common stock equal to (1) the aggregate principal amount of convertible notes to be converted, *divided by* \$1,000, *multiplied by* (2) the conversion rate in effect on the relevant conversion date.

No fractional shares will be issued upon conversion. Instead, we will pay cash in lieu of fractional shares based on the closing sales price of our common stock on the relevant conversion date.

We will deliver the consideration due in respect of any conversion on the third business day immediately following the relevant conversion date.

Conversion Rate Adjustments

The conversion rate will be adjusted as described below, except that we will not make any adjustment to the conversion rate if holders of the convertible notes participate (other than in the case of a share split or share combination), at the same time and upon the same terms as holders of our common stock and solely as a result of holding the convertible notes, in any of the transactions described below without having to convert their convertible notes as if they held a number of shares of common stock, for each \$1,000 principal amount of their convertible notes, equal to the conversion rate.

(1) If we issue solely shares of our common stock as a dividend or distribution on all or substantially all shares of our common stock, or if we subdivide or combine our common stock, the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_1}{OS_0}$$

where,

CR_0 = the conversion rate in effect immediately prior to the close of business on the record date for such dividend or distribution, or immediately prior to the open of business on the effective date of such subdivision or combination of common stock, as the case may be;

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CR_1 = the conversion rate in effect immediately after the close of business on the record date for such dividend or distribution, or immediately after the open of business on the effective date of such subdivision or combination of common stock, as the case may be;

OS_0 = the number of shares of our common stock outstanding immediately prior to the close of business on the record date for such dividend or distribution, or immediately prior to the open of business on the effective date of such subdivision or combination of common stock, as the case may be; and

OS_1 = the number of shares of our common stock outstanding immediately after such dividend or distribution, or immediately after the effective date of such subdivision or combination of common stock, as the case may be, and after giving effect to such issuance, subdivision or combination.

Any adjustment made under this clause (1) shall become effective immediately after the close of business on the record date for such dividend or distribution, or immediately after the open of business on the effective date of such subdivision or combination of common stock. If any dividend or distribution of the type described in this clause (1) is declared but not so paid or made, the conversion rate shall be immediately readjusted, effective as of the date our board of directors or a committee thereof determines not to pay such dividend or distribution, to the conversion rate that would then be in effect if such dividend or distribution had not been declared.

(2) If we distribute to all or substantially all holders of our common stock any rights, options or warrants entitling them, for a period of not more than 60 days after the date of such distribution, to subscribe for or purchase shares of our common stock, at a price per share that is less than the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding the announcement date for such distribution, the conversion rate will be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_0 + X}{OS_0 + Y}$$

where,

CR_0 = the conversion rate in effect immediately prior to the close of business on the record date for such distribution;

CR_1 = the conversion rate in effect immediately after the close of business on the record date for such distribution;

OS_0 = the number of shares of our common stock outstanding immediately prior to the close of business on the record date for such distribution;

X = the total number of shares of our common stock issuable pursuant to such rights, options or warrants; and

Y = the number of shares of our common stock equal to the aggregate price payable to exercise such rights, options or warrants, *divided by* the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding the announcement of such distribution.

Any increase made under this clause (2) will be made successively whenever any such rights, options or warrants are distributed and shall become effective immediately after the

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close of business on the record date for such distribution. To the extent that shares of common stock are not delivered after the expiration of such rights, options or warrants, the conversion rate shall be decreased to the conversion rate that would then be in effect had the increase with respect to the issuance of such rights, options or warrants been made on the basis of delivery of only the number of shares of common stock actually delivered. If such rights, options or warrants are not so distributed, the conversion rate shall be decreased to the conversion rate that would then be in effect if the record date for such issuance had not occurred.

For purposes of this clause (2), in determining whether any rights, options or warrants entitle the holders to subscribe for or purchase our common stock at a price per share that is less than the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding our announcement of such distribution, and in determining the aggregate price payable to exercise such rights, options or warrants, there shall be taken into account any consideration we receive for such rights, options or warrants and any amount payable on exercise thereof, with the value of such consideration if other than cash to be determined by our board of directors or a committee thereof.

(3) If we distribute shares of our capital stock, evidences of our indebtedness or other assets or property of ours or rights, options or warrants to acquire our capital stock or other securities, to all or substantially all holders of our common stock (excluding (i) dividends, distributions or issuances as to which an adjustment was effected under clause (1) or (2) above; (ii) dividends or distributions paid exclusively in cash referred to in clause (4) below; and (iii) spinoffs referred to further below in this clause (3)), then the conversion rate will be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0}{SP_0 - FMV}$$

where,

CR_0 = the conversion rate in effect immediately prior to the close of business on the record date for such distribution;

CR_1 = the conversion rate in effect immediately after the close of business on the record date for such distribution;

SP_0 = the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding the ex-dividend date for such distribution; and

FMV = the fair market value (as determined by our board of directors or a committee thereof) of the shares of capital stock, evidences of indebtedness, other assets, property, rights, options, warrants or securities distributed with respect to each outstanding share of our common stock as of the close of business on the ex-dividend date for such distribution.

Any increase made under the above portion of this clause (3) will become effective immediately after the close of business on the record date for such distribution. If such distribution is not so paid or made, the conversion rate shall be decreased to be the conversion rate that would then be in effect if such distribution had not been declared. Notwithstanding the foregoing, if " SP_0 " minus "FMV" (in each case as defined above) is less than \$1.00, in lieu of the foregoing increase, each holder of a note shall receive, in respect of

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each \$1,000 principal amount thereof, at the same time and upon the same terms as holders of our common stock, the amount and kind of our capital stock, evidences of indebtedness, other assets or property or rights, options or warrants to acquire our capital stock or other securities that such holder would have received if such holder owned a number of shares of common stock equal to the conversion rate in effect on the record date for the distribution.

With respect to an adjustment pursuant to this clause (3) where there has been a payment of a dividend or other distribution on our common stock of shares of capital stock of any class or series, or similar equity interest, of or relating to a subsidiary or other business unit, listed or admitted for trading on a U.S. national securities exchange, which we refer to as a "spinoff," the conversion rate will be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{FMV_0 + MP_0}{MP_0}$$

where,

CR_0 = the conversion rate in effect immediately prior to the close of business on the effective date of the spinoff;

CR_1 = the conversion rate in effect immediately after the close of business on the effective date of the spinoff;

FMV_0 = the average of the closing sales prices of the capital stock or similar equity interests distributed to holders of our common stock applicable to one share of our common stock over the first ten consecutive trading day period immediately following, and including, the effective date for the spinoff (such period, the "valuation period"); and

MP_0 = the average of the closing sales prices of our common stock over the valuation period.

The increase to the conversion rate under the preceding paragraph will occur at the open of business on the day after the last trading day of the valuation period, but will be given effect immediately after the close of business on the effective date for the spinoff. Because we will make the adjustment to the conversion rate at the end of the valuation period with retroactive effect, we will delay the settlement of any convertible notes where the conversion date occurs during the valuation period. In such event, we will deliver any shares of our common stock and cash in lieu of fractional shares (based on the adjusted conversion rate as described above) on the third business day immediately following the last day of the valuation period.

For purposes of the above calculation, (i) the "closing sales price" of any capital stock or similar equity interest shall be calculated in a manner analogous to that used to calculate the closing sales price of the common stock, (ii) whether a day is a "trading day" for the applicable capital stock or similar equity interest shall be determined in a manner analogous to that used to determine whether a day is a trading day for the common stock, and (iii) whether a day is a trading day to be included in a valuation period will be determined based on whether a day is a trading day for both the common stock and such capital stock or similar equity interest.

(4) If we make or pay any cash dividend or distribution to all, or substantially all, holders of our outstanding common stock (other than distributions described in clause (5) below or in

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connection with the liquidation or winding up of the Company), the conversion rate will be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0}{SP_0 - C}$$

where,

CR_0 = the conversion rate in effect immediately prior to the close of business on the record date for such dividend or distribution;

CR_1 = the conversion rate in effect immediately after the close of business on the record date for such dividend or distribution;

SP_0 = the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding the ex-dividend date for such dividend or distribution; and

C = the amount in cash per share we pay or distribute to holders of our common stock.

Such increase shall become effective immediately after the close of business on the record date for such dividend or distribution. If any dividend or distribution described in this clause (4) is declared but not so paid or made, the conversion rate shall be decreased, effective as of the date our board of directors or a committee thereof determines not to make or pay such dividend or distribution, to the conversion rate that would then be in effect if such dividend or distribution had not been declared. Notwithstanding the foregoing, if " SP_0 minus " C " (in each case as defined above) is less than \$1.00, in lieu of the foregoing increase to the conversion rate, each holder of a note shall receive, for each \$1,000 principal amount of convertible notes, at the same time and upon the same terms as holders of shares of our common stock, the amount of cash that such holder would have received if such holder owned a number of shares of our common stock equal to the conversion rate on the record date for such cash dividend or distribution.

(5) If we or any of our subsidiaries makes a payment in respect of a tender offer or exchange offer for our common stock and the cash and value of any other consideration included in the payment per share of common stock exceeds the average of the closing sales prices of our common stock over the ten consecutive trading day period (the "averaging period") commencing on, and including, the trading day immediately after the last date on which tenders or exchanges may be made pursuant to such tender or exchange offer (the "expiration date"), the conversion rate will be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{AC + (OS_1 \times SP_1)}{OS_0 \times SP_1}$$

where,

CR_0 = the conversion rate in effect immediately prior to the open of business on the trading day immediately after the expiration date;

CR_1 = the conversion rate in effect immediately after the open of business on the trading day immediately after the expiration date;

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AC = the aggregate value of all cash and any other consideration (as determined by our board of directors or a committee thereof) paid or payable for shares purchased in such tender or exchange offer;

OS₀ = the number of shares of our common stock outstanding immediately prior to the time (the "expiration time") such tender or exchange offer expires (prior to giving effect to the purchase or exchange of all shares accepted for purchase or exchange in such tender offer or exchange offer);

OS₁ = the number of shares of our common stock outstanding immediately after the expiration time (after giving effect to the purchase or exchange of all shares accepted for purchase or exchange in such tender offer or exchange offer); and

SP₁ = the average of the closing sales prices of our common stock over the averaging period.

The adjustment to the conversion rate under the preceding paragraph will occur at the open of business on day following the last day of the averaging period, but will be given effect immediately after the open of business on the trading day immediately following the expiration date. Because we will make the adjustment to the conversion rate at the end of the averaging period with retroactive effect, we will delay the settlement of any convertible notes where the conversion date occurs during the averaging period. In such event, we will deliver shares of our common stock and cash in lieu of fractional shares (based on the adjusted conversion rate as described above) on the third business day immediately following the last day of the averaging period. If we are, or one of our subsidiaries is, obligated to purchase our common stock pursuant to any such tender or exchange offer but we are, or such subsidiary is, permanently prevented by applicable law from effecting any such purchase or all such purchases are rescinded, the conversion rate shall be immediately decreased to the conversion rate that would be in effect if such tender or exchange offer had not been made.

For purposes hereof, the term "ex-dividend date," when used with respect to any dividend or distribution, means the first date on which shares of common stock trade, regular way, on the relevant exchange or in the relevant market from which the sale price was obtained without the right to receive such dividend or distribution, from us or, if applicable, from the seller of our common stock on such exchange or market (in the form of due bills or otherwise) as determined by such exchange or market.

The "record date" means, with respect to any dividend, distribution or other transaction or event in which the holders of our common stock have the right to receive any cash, securities or other property or in which common stock is exchanged for or converted into any combination of cash, securities or other property, the date fixed for determination of holders of our common stock entitled to receive such cash, securities or other property (whether such date is fixed by our board of directors or a duly authorized committee thereof, statute, contract or otherwise).

To the extent that we have a rights plan in effect upon conversion of the convertible notes (i.e., a poison pill), you will receive, in addition to the common stock received in connection with such conversion, the rights under the rights plan, unless prior to any conversion, the rights have separated from the common stock, in which case the conversion rate will be adjusted at the time of separation as if we distributed shares of our capital stock, evidences of our indebtedness or other assets or property of ours or rights, options or warrants to acquire our capital stock or other securities to all or substantially all holders of our common stock as described in clause (3) above, subject to readjustment in the event of the expiration, termination or redemption of such rights.

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To the extent permitted by law and applicable listing rules of The Nasdaq Global Select Market, we are permitted (but not required) to increase the conversion rate of the convertible notes by any amount for a period of at least 20 business days so long as the increase is irrevocable during the period and our board of directors or a committee thereof determines that such increase would be in our best interest or to avoid or diminish income tax to holders of our common stock or rights to purchase shares of our common stock in connection with a dividend or distribution of shares (or rights to acquire shares) or similar events. We must give at least 15 days' prior notice of any such increase in the conversion rate. We will not take any action that would result in adjustment of the conversion rate, pursuant to the provisions described above, in such a manner as to result in the reduction of the conversion price to less than the par value, if any, per share of our common stock.

You may, in some circumstances, including the distribution of cash dividends to holders of our shares of common stock, be deemed to have received a distribution or dividend subject to U.S. federal income tax as a result of an adjustment or the nonoccurrence of an adjustment to the conversion rate. If we pay withholding taxes on behalf of a holder, we may, at our option, withhold such payments from payments of cash and shares of our common stock on the convertible notes (or, in certain circumstances, against any payments on the shares of our common stock). For a discussion of the U.S. federal income tax treatment of an adjustment to the conversion rate, see "Certain Material U.S. Federal Income Tax Considerations."

We will not be required to adjust the conversion rate for any transaction or event other than those transactions and events described under clauses (1) through (5) above or under the heading " Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event" below. Without limiting the foregoing, the conversion rate will not be adjusted:

upon the issuance of any shares of our common stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on our securities and the investment of additional optional amounts in shares of our common stock under any plan;

upon the issuance of any shares of our common stock or options or rights to purchase those shares pursuant to any present or future employee, director or consultant benefit plan or program of, or assumed by, us or any of our subsidiaries;

upon the issuance of any shares of our common stock pursuant to any option, warrant, right or exercisable, exchangeable or convertible security not described in the preceding bullet and outstanding as of the date the convertible notes are first issued;

for accrued and unpaid interest, if any;

solely for a change in the par value of the common stock;

upon the repurchase of any shares of our common stock pursuant to an open-market share repurchase program or other buy-back transaction that is not a tender offer or exchange offer of the nature described in clause (5) above;

for the sale or issuance of new shares of our common stock or securities convertible into or exercisable for shares of our common stock for cash, including at a price per share less than the fair market value thereof or otherwise (except as described under clause (3) above) or in an acquisition (except as described under the heading " Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event" below); or

for a third-party tender or exchange offer.

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Adjustments to the conversion rate will be calculated to the nearest 1/10,000th of a share. Notwithstanding anything in this " Conversion of Convertible Notes Conversion Rate Adjustments" section to the contrary, we will not be required to adjust the conversion rate unless the adjustment would result in a change of at least 1% of the conversion rate. However, we will carry forward any adjustments that are less than 1% of the conversion rate and make such carried forward adjustments, regardless of whether the aggregate adjustment is greater than 1%, upon any conversion of convertible notes.

If we adjust the conversion rate pursuant to the above provisions, we will promptly deliver to the conversion agent a certificate setting forth the conversion rate, detailing the calculation of the conversion rate and describing the facts upon which the adjustment is based. In addition, we will promptly provide notice to the holders of such adjustment.

Recapitalizations, Reclassifications and Changes of our Common Stock

In the event of:

any reclassification, recapitalization or change of our common stock (other than changes resulting from a subdivision or combination);

any consolidation, merger or binding share exchange involving us; or

any sale, assignment, conveyance, transfer, lease or other disposition to another person of our property and assets as an entirety or substantially as an entirety,

in each case, in which holders of our outstanding common stock are entitled to receive cash, securities or other property for their shares of our common stock, then, at and after the effective time of the transaction, holders of convertible notes will be entitled to convert each \$1,000 principal amount of their convertible notes into the kind and amount of cash, securities or other property that a holder of a number of shares of our common stock equal to the conversion rate immediately prior to such transaction would have owned or been entitled to receive (the "reference property") upon the occurrence of such transaction. If the convertible notes become convertible into reference property, we will notify the trustee and the holders. Throughout this " Conversion of Convertible Notes" section, if our common stock has been replaced by reference property as a result of any transaction described in this paragraph, references to our common stock shall be deemed to be references to a unit of reference property that a holder of one share of common stock would have received in such transaction.

If the transaction causes our common stock to be converted into, or exchanged for, the right to receive more than a single type of consideration (determined based in part upon any form of shareholder election), the reference property into which the convertible notes will be convertible will be deemed to be the weighted average of the types and amounts of consideration received by the holders of our common stock that affirmatively make such an election. We will notify holders of the weighted average as soon as practicable after such determination is made.

A change in the conversion right such as this could substantially lessen or eliminate the value of the conversion right. For example, if a third party acquires us in a cash merger, each convertible note would be convertible solely into cash and would no longer be potentially convertible into securities whose value could increase depending on our future financial performance, prospects and other factors.

There is no precise, established definition of the phrase "all or substantially all of our consolidated property or assets" under applicable law. Accordingly, there may be uncertainty

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as to whether the provisions above would apply to a sale, transfer, lease, conveyance or other disposition of less than all of our consolidated property or assets.

Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event

If you elect to convert your convertible notes at any time from, and including, the effective date of a make whole adjustment event (as defined below) to, and including, the business day immediately preceding the related fundamental change repurchase date (or if a make whole adjustment event does not also constitute a fundamental change as described below under " Conversion of Convertible Notes Repurchase of Convertible Notes at Your Option upon a Fundamental Change," the 35th business day immediately following the effective date of such make whole adjustment event (such period, the "make whole adjustment event period")), the conversion rate will be increased by an additional number of shares of common stock (such shares, the "additional shares") as described below. We will notify holders, the trustee and the conversion agent promptly after the effective date of such make whole adjustment event, and in any event no later than five business days after such effective date, and will indicate in such notice the last day of the make whole adjustment period.

A "make whole adjustment event" means the occurrence prior to the maturity date of either (i) any transaction or event that constitutes a "change in control" (as defined below and determined after giving effect to any exceptions to or exclusions from such definition other than the exception in the proviso in clause (2)) or (ii) any "termination of trading" as defined below.

The number of additional shares of our common stock by which the conversion rate will be increased for conversions during the make whole adjustment event period will be determined by reference to the table below, based on the date on which the make whole adjustment event occurs or becomes effective, which we refer to as the "effective date," and the price (the "stock price") paid (or deemed to be paid) per share of our common stock in the make whole adjustment event. If the holders of our common stock receive only cash in a make whole adjustment event described in clause (2) of the definition of change in control, the stock price shall be the cash amount paid per share. Otherwise, the stock price shall be the average of the closing sales prices of our common stock over the ten consecutive trading day period ending on, and including, the trading day immediately preceding the effective date of the make whole adjustment event. Our board of directors or a committee thereof will make appropriate adjustments to the stock price, in its good faith determination, to account for any adjustment to the conversion rate that becomes effective, or any event requiring an adjustment to the conversion rate where the ex-dividend date of the event occurs, at any time during those ten consecutive trading days.

The stock prices set forth in the column headings of the table below will be adjusted as of any date on which the conversion rate of the convertible notes is otherwise adjusted. The adjusted stock prices will equal the stock prices immediately prior to such adjustment, *multiplied by* a fraction, the numerator of which is the conversion rate immediately prior to the adjustment giving rise to the stock price adjustment and the denominator of which is the conversion rate as so adjusted. The number of additional shares will be adjusted in the same manner and at the same time as the conversion rate as set forth under " Conversion of Convertible Notes Conversion Rate Adjustments."

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The following table sets forth the number of additional shares to be received per \$1,000 principal amount of convertible notes for each stock price and effective date set forth below:

Effective Date	Stock Price												
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
April , 2011													
April 15, 2012													
April 15, 2013													
April 15, 2014													
April 15, 2015													
April 15, 2016													

The exact stock prices and effective dates may not be set forth in the table above, in which case:

if the stock price is between two stock prices in the table or the effective date is between two effective dates in the table, the number of additional shares will be determined by a straight-line interpolation between the number of additional shares set forth for the higher and lower stock prices and the earlier and later effective dates based on a 365-day year, as applicable;

if the stock price is greater than \$ _____ per share (subject to adjustment in the same manner as the stock prices in the column headings in the table above), no increase in the conversion rate will be made; and

if the stock price is less than \$ _____ per share (subject to adjustment in the same manner as the stock prices in the column headings in the table above), no increase in the conversion rate will be made.

Notwithstanding the foregoing, in no event will the total number of shares of common stock issuable upon conversion exceed _____ per \$1,000 principal amount of convertible notes, subject to adjustment in the same manner as the conversion rate as set forth under " Conversion of Convertible Notes Conversion Rate Adjustments."

Our obligation to increase the conversion rate upon the occurrence of a make whole adjustment event could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness and to equitable remedies.

Repurchase of Convertible Notes at Your Option upon a Fundamental Change

If a fundamental change occurs, you will have the right to require us to repurchase for cash all or any part of your convertible notes in integral multiples of \$1,000 on the day of our choosing that is not less than 20 or more than 35 business days after the occurrence of such fundamental change (such day, the "fundamental change repurchase date") at a price (the "fundamental change repurchase price") equal to 100% of the principal amount of the convertible notes to be repurchased, *plus* accrued and unpaid interest to, but excluding, the fundamental change repurchase date; *provided* that if the fundamental change repurchase date falls after a regular record date and on or prior to the interest payment date to which it relates, interest accrued to the interest payment date will be paid to holders of the convertible notes as of the preceding regular record date, and the fundamental change repurchase price we are required to pay to the holders surrendering the convertible notes for repurchase will be equal to 100% of the principal amount of convertible notes subject to repurchase and will not include any accrued and unpaid interest.

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We will mail to the trustee and to each holder a written notice of the fundamental change (the "repurchase right notice") promptly, and in any event no later than five business days after the occurrence of such fundamental change. This repurchase right notice shall state certain specified information, including:

the events causing the fundamental change;

the effective date of the fundamental change, and whether the fundamental change is a make whole adjustment event, and, if so, the effective date of the make whole adjustment event;

information about the holders' right to convert the convertible notes;

information about the holders' right to require us to repurchase the convertible notes;

the last date on which a holder may exercise the repurchase right;

the fundamental change repurchase price;

the fundamental change repurchase date;

the conversion rate and any adjustments to the conversion rate;

the procedures required for exercise of the repurchase option upon the fundamental change;

the name and address of the paying and conversion agents; and

that the convertible notes with respect to which a repurchase exercise notice (as defined below) has been given by the holder may be converted only if the holder withdraws the repurchase exercise notice in accordance with the terms of the indenture.

You must deliver written notice of your exercise of the repurchase right (the "repurchase exercise notice") to the paying agent during the period beginning on, and including, the date we mail to the trustee and each holder the repurchase right notice as described above and ending at the close of business on the business day immediately preceding the fundamental change repurchase date. The repurchase exercise notice must specify the convertible notes for which the repurchase right is being exercised. If you wish to withdraw this election, you must provide a written notice of withdrawal to the paying agent at any time until the close of business on the business day prior to the fundamental change repurchase date. If the convertible notes are not in certificated form, the notice given by each holder (and any withdrawal notice) must comply with applicable DTC procedures.

You may withdraw any repurchase exercise notice (in whole or in part) by a written notice of withdrawal delivered to the paying agent prior to the close of business on the business day prior to the fundamental repurchase date. The notice of withdrawal must state:

the principal amount of the withdrawn convertible notes;

if certificated convertible notes have been issued, the certificate numbers of the withdrawn convertible notes; and

the principal amount, if any, that remains subject to the repurchase exercise notice.

A "Fundamental change" means the occurrence prior to the maturity date of either (i) a change in control or (ii) a termination of trading. A "change in control" will be deemed to

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have occurred if any of the following occurs after the time the convertible notes are originally issued:

(1) any "person" or "group" (as defined below), other than us, our subsidiaries and our and their employee benefit plans, files a Schedule 13D or a Schedule TO, or any successor schedule, or any other schedule, form or report, including, in each case, any amendment thereto, under the Exchange Act disclosing, or we otherwise become aware, that such person or group has become the direct or indirect "beneficial owner" (as defined below) of shares of our voting stock representing 50% or more of the total voting power of all outstanding classes of our voting stock entitled to vote generally in elections of directors, unless such beneficial ownership arises as a result of a revocable proxy delivered in response to a public proxy or consent solicitation made pursuant to the applicable rules and regulations under the Exchange Act; *provided* that no person shall be deemed to be the beneficial owner of any securities tendered pursuant to a tender or exchange offer made by or on behalf of such person until such tendered securities are accepted for purchase or exchange under such offer;

(2) consummation of (A) any recapitalization, reclassification or change of our common stock (other than changes resulting from a subdivision or combination) as a result of which our common stock would be converted into, or exchanged for, stock, other securities, other property or assets or (B) any share exchange, consolidation or merger of us pursuant to which our common stock will be converted into cash, securities or other property, or any sale, lease or other transfer in one transaction or a series of transactions of all or substantially all of the consolidated assets of us and our subsidiaries, taken as a whole, to any person other than one of our subsidiaries; provided, however, that a transaction where the holders of all classes of our common equity immediately prior to such transaction that is a share exchange, consolidation or merger own, directly or indirectly, more than 50% of all classes of common equity of the continuing or surviving corporation or transferee or the parent thereof immediately after such transaction shall not be a change in control pursuant to this clause (2); or

(3) the holders of our capital stock approve any plan or proposal for the liquidation or dissolution of A123 (whether or not otherwise in compliance with the indenture).

However, notwithstanding the foregoing, there shall not be deemed to have occurred a "change of control" pursuant to the definition above, if at least 90% of the consideration received or to be received by our common shareholders, excluding cash payments for fractional shares and cash payments made pursuant to dissenters' appraisal rights, in connection with such transaction consists of shares of common stock traded on the New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors), or will be so traded immediately following the transaction, and, as a result of the transaction, the convertible notes become convertible into or exchangeable for such consideration.

A "*termination of trading*" means that our common stock (or other common stock underlying the convertible notes) ceases to be listed on any of the New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors).

For purposes of this change in control definition:

"*person*" and "*group*" have the meanings given to them for purposes of Sections 13(d) and 14(d) of the Exchange Act or any successor provisions, and the term "*group*" includes any group acting for the purpose of acquiring, holding, voting or disposing of

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securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act, or any successor provision;

a "*beneficial owner*" will be determined in accordance with Rule 13d-3 under the Exchange Act, as in effect on the date of the indenture;

"*beneficial ownership*" has a meaning correlative to that of beneficial owner; and

"*voting stock*" means any class or classes of capital stock or other interests then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of the board of directors, managers or trustees.

The term "all or substantially all" as used in the definition of change in control in respect of the sale, lease or transfer of our assets will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. There is no precise, established definition of this phrase under applicable law. Accordingly, there may be uncertainty as to whether the provisions above would apply to a sale, lease or other transfer of our consolidated property or assets.

We will be required to repurchase the convertible notes that have been validly surrendered for repurchase and not withdrawn prior to the close of business on the business day immediately prior to the fundamental change repurchase date. You will receive payment of the fundamental change repurchase price on the later of (i) the fundamental change repurchase date and (ii) the time of book-entry transfer or the delivery of your convertible notes. If the paying agent holds money sufficient to pay the fundamental change repurchase price of the convertible notes on the fundamental change repurchase date, then on the fundamental change repurchase date:

the convertible notes will cease to be outstanding and interest will cease to accrue (whether or not book-entry transfer of the convertible notes is made or whether or not the convertible notes are delivered to the paying agent); and

all other rights of the holder will terminate (other than the right to receive the fundamental change repurchase price upon book-entry transfer or delivery of the convertible notes).

In connection with any repurchase of convertible notes in the event of a fundamental change, we will in accordance with the indenture:

comply with the provisions of Rule 13e-4, Rule 14e-1 and any other tender offer rules under the Exchange Act, to the extent any such rules are applicable;

file a Schedule TO or any successor or similar schedule, if required, under the Exchange Act; and

otherwise comply with all federal and state securities laws in connection with any offer by us to repurchase the convertible notes upon a fundamental change.

No convertible notes may be repurchased by us on any date at the option of holders upon a fundamental change if the principal amount of the convertible notes has been accelerated, and such acceleration has not been rescinded, on or prior to such date (except in the case of an acceleration resulting from a default by us in the payment of the fundamental change repurchase price with respect to such convertible notes).

This fundamental change repurchase feature may make more difficult or discourage a takeover of us and the removal of incumbent management. We are not, however, aware of any specific effort to accumulate shares of our common stock or to obtain control of us by means of a merger, tender offer, solicitation or otherwise. In addition, the fundamental change repurchase feature is not part of a plan by management to adopt a series of anti-takeover provisions.

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We could, in the future, enter into certain transactions, including recapitalizations, that would not constitute a fundamental change but would increase the amount of debt outstanding, or otherwise adversely affect a holder. Neither we nor our subsidiaries are prohibited from incurring debt under the indenture. The incurrence of significant amounts of additional debt could adversely affect our ability to service our debt, including the convertible notes. Furthermore, holders may not be entitled to require us to repurchase their convertible notes upon a fundamental change in certain circumstances involving a significant change in the composition of our board.

If a fundamental change were to occur, we may not have sufficient funds to pay the fundamental change repurchase price for the convertible notes surrendered by holders. See "Risk Factors Risks Related to this Offering We may not have the ability to raise the funds necessary to repurchase the convertible notes upon a fundamental change as required by the indenture governing the convertible notes." Our ability to repurchase the convertible notes for cash on any fundamental change repurchase date may be limited by restrictions on our ability to obtain funds for such repurchase through dividends from our subsidiaries. Further, any future indebtedness documents may contain provisions prohibiting repurchase of the convertible notes under some circumstances or expressly prohibiting our repurchase of the convertible notes upon a fundamental change. In addition, existing indebtedness documents, including our term loan and security agreement with Silicon Valley Bank and Gold Hill Venture Lending 03, L.P., and our forgivable loan agreement with Massachusetts Clean Energy Technology Center, contain, and any future indebtedness documents may contain, provisions providing that a fundamental change constitutes an event of default under those documents. If a fundamental change occurs at a time when we are prohibited from repurchasing convertible notes, we could seek the consent of our lenders to repurchase the convertible notes or attempt to refinance this debt. If we do not obtain any required consent, we would not be permitted to repurchase the convertible notes. Our failure to repurchase surrendered convertible notes would constitute an event of default under the indenture, which could constitute an event of default under our senior indebtedness then outstanding, if any, and might constitute a default under the terms of our other indebtedness then outstanding, if any.

Events of Default

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

- (1) we fail to pay the principal of any note when due;
- (2) we fail to deliver the shares of our common stock due upon conversion of any note (including any additional shares) when due, if such failure continues for a period of three business days;
- (3) we fail to pay any interest on any note when due if such failure continues for 30 days;
- (4) we fail to pay the fundamental change repurchase price of any note when due;
- (5) we fail to timely provide the repurchase right notice as described under " Repurchase of Convertible Notes at Your Option upon a Fundamental Change" or we fail to timely provide notice of the anticipated or actual effective date of a make whole adjustment event as described under " Adjustment to Shares Delivered upon Conversion upon a Make Whole Adjustment Event," if such failure continues for three days;
- (6) we fail to comply with our obligations under " Consolidation, Merger and Sale of Assets";

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(7) default by us or any of our subsidiaries with respect to any mortgage, agreement or other instrument under which there may be outstanding, or by which there may be secured or evidenced, any indebtedness for money borrowed in excess of \$25 million in the aggregate of us and/or any such subsidiary, whether such indebtedness now exists or shall hereafter be created (i) resulting in such indebtedness becoming or being declared due and payable or (ii) constituting a failure to pay the principal or interest of any such debt when due and payable at its stated maturity, upon required repurchase, upon acceleration or otherwise, in each case, after any applicable grace period and without such indebtedness having been discharged or the acceleration of such indebtedness having been cured, rescinded, waived or annulled within 30 days after written notice to the company by the trustee or the holders of at least 25% in aggregate principal amount of the outstanding convertible notes;

(8) final judgment for the payment of \$25 million or more (excluding any amounts covered by insurance) rendered against us or any of our subsidiaries, which judgment is not discharged or stayed within 60 days after (i) the date on which the right to appeal thereof has expired if no such appeal has commenced, or (ii) the date on which all rights to appeal have been extinguished;

(9) we fail for 60 days after written notice from the trustee or the holders of at least 25% in principal amount of the convertible notes then outstanding has been received to comply with any of our other agreements contained in the convertible notes or indenture; or

(10) certain events of bankruptcy, insolvency or reorganization of us or any of our subsidiaries that is a "significant subsidiary" (or any group of subsidiaries that, taken together, would constitute a "significant subsidiary" as defined in Regulation S-X under the Securities Act).

If an event of default, other than an event of default described in clause (10) above with respect to us, occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding convertible notes may declare the principal amount of the convertible notes to be due and payable immediately. If an event of default described in clause (10) above occurs with respect to us, the principal amount of the convertible notes will automatically become immediately due and payable.

After any such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of the convertible notes may, except with respect to the nonpayment of principal (including the fundamental change repurchase price) or interest or with respect to the failure to deliver the shares of our common stock due upon conversion, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal and accrued and unpaid interest, if any, have been cured or waived.

Notwithstanding the foregoing, the indenture will provide that, to the extent we elect, the sole remedy for an event of default during the first 270 days after the occurrence of an event of default relating to (i) our failure to file with the trustee pursuant to Section 314(a)(1) of the Trust Indenture Act any documents or reports that we are required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act or (ii) our failure to comply with our obligations as set forth under " Reports" below, will after the occurrence of such event of default consist exclusively of the right to receive additional interest on the convertible notes at an annual rate equal to 0.50% of the aggregate principal amount of the convertible notes to, but not including, the 271st day thereafter (or, if applicable, the earlier date on which the event of default relating to the reporting obligations is cured or waived). Any such additional

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interest will be payable in the same manner and on the same dates as the stated interest payable on the convertible notes. If the event of default is continuing on the 271st day after an event of default relating to a failure to comply with the reporting obligations described above first occurs, the convertible notes will be subject to acceleration as provided above. The provisions of the indenture described in this paragraph will not affect the rights of holders of convertible notes in the event of the occurrence of any other event of default.

In order to elect to pay additional interest as the sole remedy during the first 270 days after the occurrence of an event of default relating to the failure to comply with the reporting obligations in accordance with the immediately preceding paragraph, we must notify all holders of record of convertible notes and the trustee and paying agent of such election on or before the close of business on the fifth business day after the date on which such event of default otherwise would occur. Upon our failure to timely give such notice or pay additional interest, the convertible notes will be immediately subject to acceleration as provided above.

If any portion of the amount payable on the convertible notes upon acceleration is considered by a court to be unearned interest, the court could disallow recovery of any such portion.

Subject to the trustee's duties in the case of an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders have offered to the trustee reasonable indemnity or security reasonably satisfactory to it against any loss, liability or expense. Subject to the indenture, applicable law and the trustee's indemnification, the holders of a majority in aggregate principal amount of the outstanding convertible notes will have the right to 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 convertible notes. The indenture provides that in the event an event of default has occurred and is continuing, the trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The trustee, however, may refuse to follow any direction that conflicts with law or the indenture or that the trustee determines is unduly prejudicial to the rights of any other holder or that would involve the trustee in personal liability.

No holder will have any right to institute any proceeding under the indenture, or for the appointment of a receiver or a trustee, or for any other remedy under the indenture unless:

the holder has previously given the trustee written notice of a continuing event of default;

the holders of at least 25% in aggregate principal amount of the convertible notes then outstanding have made a written request and have offered reasonable security or indemnity to the trustee to institute such proceeding as trustee; and

the trustee has failed to institute such proceeding within 60 days after such notice, request and offer and has not received from the holders of a majority in aggregate principal amount of the convertible notes then outstanding a direction inconsistent with such request within 60 days after such notice, request and offer.

However, the above limitations do not apply to a suit instituted by a holder for the enforcement of payment of the principal of or interest on any note on or after the applicable due date or the right to convert the note in accordance with the indenture.

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Generally, the holders of not less than a majority of the aggregate principal amount of outstanding convertible notes may waive any default or event of default other than a default in the failure to:

pay the principal (including the fundamental change repurchase price) of or any interest on any note when due;

deliver the shares of common stock owing upon conversion of any note (including additional shares, if any) within the time period required by the indenture; or

comply with any of the provisions of the indenture that may not be modified without the consent of the holder of each outstanding note affected.

The indenture provides that if a default occurs and is continuing and is known to the trustee, the trustee must mail to each holder notice of the default within 90 days after it occurs. Except in the case of a default in the payment of principal (including the fundamental change repurchase price) of or interest on any note or a default in the failure to deliver the consideration due upon conversion, the trustee may withhold notice if and so long as a committee of trust officers of the trustee in good faith determines that withholding notice is in the interests of the holders. In addition, we are required to deliver to the trustee (i) within 120 days after the end of each fiscal year, a certificate indicating whether the signers thereof know of any default that occurred during the previous year and whether we, to the officers' knowledge, are in default in the performance or observance of any of the terms, provisions and conditions of the indenture and (ii) within 30 days after the occurrence thereof, written notice of any event that would constitute a default under the indenture, its status and what action we are taking or propose to take in respect thereof. However, the trustee need not mail the notice if the default or event of default (i) has been cured or waived; or (ii) is not in the payment or delivery of any amounts due with respect to any convertible note and the trustee in good faith determines that withholding the notice is in the best interests of the holders.

Payments of the fundamental change repurchase price and principal of and interest on the convertible notes that are not made when due will accrue interest per annum at the then-applicable interest rate *plus* 1% from the required payment date, to the extent permitted by law.

Modification and Waiver

We and the trustee may amend or supplement the indenture with respect to the convertible notes with the consent of the holders of a majority in aggregate principal amount of the outstanding convertible notes. In addition, the holders of a majority in aggregate principal amount of the outstanding convertible notes may waive our compliance in any instance with any provision of the indenture without notice to the other holders of convertible notes. However, no amendment, supplement or waiver may be made without the consent of each holder of outstanding convertible notes affected thereby if such amendment, supplement or waiver would:

extend the maturity of the principal of, or the stated time for payment of interest on, any note;

reduce the principal amount of, or the rate of interest on, any note;

reduce the amount of principal payable upon acceleration of the maturity of the convertible notes;

change the currency of payment of principal of or interest on the convertible notes or change any note's place of payment;

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impair the right of any holder to receive payment of principal of and interest on such holder's convertible notes on or after the due dates therefor or to institute suit for the enforcement of any payment on, or with respect to, the convertible notes;

modify the provisions with respect to the repurchase rights of the holders upon a fundamental change as described above under " Repurchase of Convertible Notes at Your Option upon a Fundamental Change" in a manner adverse to holders of convertible notes;

adversely affect the right of holders to convert convertible notes;

change the ranking of the convertible notes; or

modify provisions with respect to modification, amendment or waiver (including waiver of events of default), except to increase the percentage required for modification, amendment or waiver or to provide for consent of each affected holder of convertible notes.

We and the trustee may amend or supplement the indenture or the convertible notes without notice to, or the consent of, the holders of the convertible notes to:

cure any ambiguity, defect or inconsistency that does not adversely affect holders of the convertible notes;

provide for the assumption by a successor entity of our obligations under the indenture;

add guarantees with respect to the convertible notes;

secure the convertible notes;

add to our covenants for the benefit of the holders or surrender any right or power conferred upon us;

make any other change that does not adversely affect the rights of any holder;

comply with any requirement of the SEC in connection with the qualification on the indenture under the Trust Indenture Act;
or

conform the provisions of the indenture to this "Description of the Convertible Notes" section in this preliminary prospectus supplement, as supplemented by the related pricing term sheet.

The consent of the holders is not necessary under the indenture to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. After an amendment under the indenture becomes effective, we are required to mail to the holders a notice briefly describing such amendment. However, the failure to give such notice to all the holders, or any defect in the notice, will not impair or affect the validity of the amendment.

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Consolidation, Merger and Sale of Assets

We may not consolidate with, enter into a binding share exchange with, or merge with or into, another person or sell, assign, convey, transfer, lease or otherwise dispose of our properties and assets substantially as an entirety to any successor person, unless:

the resulting, surviving or transferee person (if not us) is a corporation organized and existing under the laws of the United States, any state of the United States or the District of Columbia and expressly assumes by supplemental indenture all of our obligations under the convertible notes and the indenture;

to the extent that the surviving or transferee person is not the issuer of any part of the reference property (as defined above), such issuer of the reference property guarantees the convertible notes or otherwise provides adequate assurance that the immediate resale of any reference property received upon conversion by holders of convertible notes who are not affiliates of A123 or the surviving or transferee person will not require registration under the Securities Act of 1933; and

immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing.

Upon any such consolidation, binding share exchange, merger, sale, assignment, conveyance, transfer, lease or other disposition, the resulting, surviving or transferee corporation (if not us) shall succeed to, and may exercise every right and power of, A123 under the indenture, in our name or in its own name and we will be released (other than in the case of a lease) from all our liabilities under the indenture and under the convertible notes.

Although these types of transactions are permitted under the indenture, certain of the foregoing transactions could constitute a change of control (as defined above) permitting each holder to require us to repurchase the convertible notes of such holder as described above.

The term "all or substantially all" will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. There is no precise, established definition of this phrase under applicable law. Accordingly, there may be uncertainty as to whether the provisions above would apply to a sale, lease or other transfer of our consolidated property or assets.

Satisfaction and Discharge

We may satisfy and discharge our obligations under the indenture by delivering to the registrar for cancellation all outstanding convertible notes or depositing with the trustee or delivering to the holders, as applicable, after the convertible notes have become due and payable, whether on the maturity date or on any fundamental change repurchase date or upon conversion or otherwise, cash and/or shares of our common stock sufficient to satisfy all obligations under the outstanding convertible notes and all other sums payable under the indenture by us. Such discharge is subject to terms contained in the indenture.

Transfer and Exchange

A holder may transfer or exchange convertible notes at the office of the registrar in accordance with the indenture. The registrar and the trustee may require a holder, among other things, to furnish appropriate endorsements and transfer documents. No service charge will be imposed by us, the trustee or the registrar for any registration of transfer or exchange of convertible notes, but any tax or similar governmental charge required by law or permitted

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by the indenture because a holder requests any shares to be issued in a name other than such holder's name will be paid by such holder. We are not required to transfer or exchange any note surrendered for repurchase upon a fundamental change or upon conversion except for any portion of that note not being repurchased or converted, as the case may be.

We have initially appointed the trustee as the registrar, paying agent and conversion agent, acting through its corporate trust office. We reserve the right to:

vary or terminate the appointment of the registrar, paying agent or conversion agent;

appoint additional paying agents or conversion agents; or

approve any change in the office through which any registrar or any paying agent or conversion agent acts.

Payment and Paying Agents

Payments in respect of the principal and interest, including additional interest, if any, on global notes registered in the name of DTC or its nominee will be payable to DTC or its nominee, as the case may be, in its capacity as the registered holder under the indenture. In the case of certificated notes, payments will be made in U.S. dollars at the office of the trustee or, at our option, by check mailed to the holder's registered address (or, if requested by a holder of more than \$1,000,000 principal amount of convertible notes, by wire transfer to the account designated by such holder). We will make any required interest payments to the person in whose name each note is registered at the close of business on the regular record date for the interest payment.

The trustee will be designated as our paying agent for payments on the convertible notes. We may at any time designate additional paying agents or rescind the designation of any paying agent or approve a change in the office through which any paying agent acts.

Subject to the requirements of any applicable abandoned property laws, the trustee and paying agent shall pay to us upon written request any money held by them for payments on the convertible notes that remain unclaimed for two years after the date upon which that payment has become due. After payment to us, holders entitled to the money must look to us for payment. In that case, all liability of the trustee or paying agent with respect to that money will cease.

Repurchase and Cancellation

We may, to the extent permitted by law, directly or indirectly, purchase convertible notes in the open market or otherwise, whether by us, our subsidiaries, affiliates, agents, or dealers, or through a private or public tender or exchange offer or through counterparties pursuant to private agreements, including by cash-settled swaps or other derivatives. We will cause any convertible notes so purchased by us or our subsidiaries (other than convertible notes purchased pursuant to cash-settled swaps or other derivatives) to be surrendered to the trustee for cancellation, and they will no longer be considered to be "outstanding" under the indenture upon their purchase.

Reports

The indenture provides that any documents or reports that we are required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act must be filed by us with the trustee within 15 days after the same are required to be filed with the SEC (giving effect to any extension provided by Rule 12b-25 under the Exchange Act). Documents filed by us with the

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SEC via the EDGAR system (or any successor thereto) will be deemed to be filed with the trustee as of the time such documents are filed via EDGAR.

Replacement of Convertible Notes

We will replace mutilated, destroyed, stolen or lost convertible notes at the holder's expense upon delivery to the trustee of the mutilated convertible notes, or evidence of the loss, theft or destruction of the convertible notes satisfactory to us and the trustee. In the case of a lost, stolen or destroyed note, indemnity satisfactory to the trustee and us may be required at the expense of the holder of such note before a replacement note will be issued.

Calculations in Respect of the Convertible Notes

We will be responsible for making many of the calculations called for under the indenture and the convertible notes. These calculations include, but are not limited to, determination of the closing sales price of our common stock, adjustments to the conversion rate, accrued interest payable on the convertible notes and the applicable conversion rate and conversion price. We will make all these calculations in good faith and, absent manifest error, our calculations will be final and binding on the holders of convertible notes. We will provide a schedule of our calculations to each of the trustee and the conversion agent upon request (unless otherwise required by the indenture), and each of the trustee and conversion agent is entitled to rely conclusively upon the accuracy of our calculations without independent verification. The trustee will forward our calculations to any holder upon the request of that holder.

Notices

Except as otherwise described herein, notice to registered holders of the convertible notes will be given to the addresses as they appear in the security register. Notices will be deemed to have been given on the date of such mailing or electronic delivery. Whenever a notice is required to be given by us, such notice may be given by the trustee on our behalf (and we will make any notice we are required to give to holders available on our website).

Governing Law

Each of the indenture and the convertible notes, and any claim, controversy or dispute arising under or related to the indenture or the convertible notes, will be governed by, and construed in accordance with, the laws of the State of New York.

Concerning the Trustee

U.S. Bank National Association has agreed to serve as the trustee under the indenture. The trustee will be permitted to deal with us and our affiliates with the same rights as if it were not trustee.

The holders of a majority in principal amount of all outstanding convertible notes will have the right to direct the time, method and place of conducting any proceeding for exercising any remedy or power available to the trustee. However, any such direction may not conflict with any law or the indenture, may not be unduly prejudicial to the rights of another holder or the trustee and may not involve the trustee in personal liability.

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Book-Entry, Delivery and Form

We will initially issue the convertible notes in the form of one or more global securities. Each global security will be deposited with the trustee as custodian for DTC and registered in the name of Cede & Co., as nominee of DTC. Except as set forth below, the global security may be transferred, in whole and not in part, only to DTC or another nominee of DTC. You may hold your beneficial interests in the global security directly through DTC if you have an account with DTC or indirectly through organizations that have accounts with DTC. Convertible notes in definitive, fully registered, certificated form, referred to as "certificated securities," will be issued only in certain limited circumstances described below.

DTC has advised us that it is:

a limited purpose trust company organized under the laws of the State of New York;

a "banking organization" within the meaning of the New York State Banking Law;

a member of the Federal Reserve System;

a "clearing corporation" within the meaning of the New York Uniform Commercial Code; and

a "clearing agency" registered under Section 17A of the Exchange Act.

DTC was created to hold securities of institutions that have accounts with DTC, referred to as "participants," and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates.

DTC's participants include securities brokers and dealers, which may include the initial purchasers, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's book-entry system is also available to others such as banks, brokers, dealers and trust companies, referred to as the "indirect participants," that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

We expect that, pursuant to procedures established by DTC upon the deposit of the global security with DTC, DTC will credit, on its book-entry registration and transfer system, the principal amount of convertible notes represented by such global security to the accounts of participants. The accounts to be credited shall be designated by the initial purchasers. Ownership of beneficial interests in the global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in the global security will be shown on, and the transfer of those beneficial interests will be effected only through, records maintained by DTC (with respect to participants' interests), the participants and the indirect participants. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These limits and laws may impair the ability to transfer or pledge beneficial interests in the global security.

Owners of beneficial interests in global securities who desire to convert their interests into shares of our common stock should contact their brokers or other participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion.

So long as DTC, or its nominee, is the registered owner or holder of a global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the convertible notes represented by the global security for all purposes under the indenture and the convertible notes. In addition, no owner of a beneficial interest in a global security will be

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able to transfer that interest except in accordance with the applicable procedures of DTC. Except as set forth below, as an owner of a beneficial interest in the global security, you will not be entitled to have the convertible notes represented by the global security registered in your name, will not receive or be entitled to receive physical delivery of certificated securities and will not be considered to be the owner or holder of any convertible notes under the global security.

We will make payments of principal of, and any interest on, the convertible notes represented by the global security registered in the name of and held by DTC or its nominee to DTC or its nominee, as the case may be, as the registered owner and holder of the global security. Neither we, the trustee nor any paying agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial interests in the global security or for maintaining, supervising or reviewing any records relating to such beneficial interests.

We expect that DTC or its nominee, upon receipt of any payment of principal of, or any interest on, the global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants or indirect participants to owners of beneficial interests in the global security held through such participants or indirect participants will be governed by standing instructions and customary practices and will be the responsibility of such participants or indirect participants. We will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial interests in the global security for any note or for maintaining, supervising or reviewing any records relating to such beneficial interests or for any other aspect of the relationship between DTC and its participants or indirect participants or the relationship between such participants or indirect participants and the owners of beneficial interests in the global security owning through such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

Convertible notes in physical, certificated form will be issued and delivered to each person that DTC identifies as a beneficial owner of the related convertible notes only if:

DTC notifies us at any time that it is unwilling or unable to continue as depository for the global notes and a successor depository is not appointed within 90 days;

DTC ceases to be registered as a clearing agency under the Exchange Act and a successor depository is not appointed within 90 days; or

an event of default with respect to the convertible notes has occurred and is continuing and such beneficial owner requests that its convertible notes be issued in physical, certificated form.

Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global security among participants of DTC, it is under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither we nor the trustee will have any responsibility, or liability, for the performance by DTC or the participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

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CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of certain material U.S. federal income tax considerations related to the purchase, ownership and disposition of the convertible notes and the shares of common stock into which the convertible notes may be converted. This summary is based upon provisions of the Internal Revenue Code of 1986, as amended, or the Code, applicable regulations, administrative rulings and judicial decisions in effect as of the date of this prospectus supplement any of which may subsequently be changed, possibly retroactively, or interpreted differently by the Internal Revenue Service, or the IRS, so as to result in U.S. federal income tax consequences different from those discussed below. Except where noted, this summary deals only with a note or share of common stock held as a capital asset by a beneficial owner who purchases the note on original issuance at the first price at which a substantial amount of the convertible notes are sold for cash to persons other than bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers, which we refer to as the "issue price." This summary does not address all aspects of U.S. federal income taxes related to the purchase, ownership and disposition of the convertible notes and the shares of common stock into which the convertible notes may be converted and does not deal with all tax consequences that may be relevant to holders in light of their personal circumstances or particular situations, such as:

tax consequences to holders who may be subject to special tax treatment, including dealers in securities or currencies, financial institutions, regulated investment companies, real estate investment trusts, tax-exempt entities, insurance companies and traders in securities that elect to use a mark-to-market method of accounting for their securities;

tax consequences to persons holding convertible notes or shares of our common stock as a part of a hedging, integrated, conversion or constructive sale transaction or a straddle;

tax consequences to U.S. holders (as defined below) of convertible notes or shares of common stock whose "functional currency" is not the U.S. dollar;

tax consequences to investors in pass-through entities;

tax consequences to certain former citizens or residents of the United States;

the Medicare tax or alternative minimum tax consequences, if any;

any state, local or foreign tax consequences; and

estate or gift taxes, if any, except as set forth below with respect to non-U.S. holders.

If a partnership (or any entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds convertible notes or shares of common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner in a partnership holding the convertible notes or shares of common stock, you should consult your tax advisors.

If you are considering the purchase of convertible notes, you should consult your tax advisors concerning the U.S. federal income tax consequences to you in light of your own specific situation, as well as consequences arising under the laws of any other taxing jurisdiction.

In this discussion, we use the term "U.S. holder" to refer to a beneficial owner of convertible notes or shares of common stock received upon conversion of the convertible notes that is, for U.S. federal income tax purposes:

an individual citizen or resident of the United States;

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a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust, if it (i) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

We use the term "non-U.S. holder" to describe a beneficial owner (other than a partnership or other pass-through entity) of convertible notes or shares of common stock received upon conversion of the convertible notes that is not a U.S. holder. Non-U.S. holders should consult their tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them.

Consequences to U.S. Holders

Taxation of Interest

The stated interest on a note will generally be taxable to a U.S. holder as ordinary income at the time it is received or accrued in accordance with the U.S. holder's usual method of accounting for tax purposes. If the issue price of the convertible notes is less than their stated redemption price at maturity (generally, the sum of all payments required under the convertible note other than payments of stated interest) and the difference is more than a de minimis amount (as set forth in the applicable Treasury regulations), a U.S. holder will be required to include the difference in income as original issue discount as it accrues in accordance with a constant yield method. It is anticipated, and this discussion assumes, that any difference between the issue price of the convertible notes and their stated redemption price at maturity will be a de minimis amount and that the convertible notes will not be treated as issued with original issue discount for U.S. federal income tax purposes.

In certain situations, we may be obligated to make payments in excess of the stated interest. These potential payments may implicate the provisions of U.S. Treasury regulations relating to "contingent payment debt instruments." We intend to take the position that the convertible notes should not be treated as contingent payment debt instruments. Our position is based in part on certain assumptions regarding the likelihood, as of the date of issuance of the convertible notes, that these additional amounts will have to be paid. Our position is binding on a holder unless such holder discloses its contrary position in the manner required by applicable U.S. Treasury regulations. The IRS, however, may take a position contrary to our position, which could affect the timing and character of a holder's income and the timing of our deductions with respect to the convertible notes. Holders are urged to consult their tax advisors regarding the potential application of the contingent payment debt instrument rules and the consequences thereof. This discussion assumes the convertible notes are not treated as contingent payment debt instruments.

Sale, Redemption or Other Taxable Disposition of Convertible Notes

Except as provided below under " Consequences to U.S. Holders Conversion of Convertible Notes," a U.S. holder generally will recognize gain or loss upon the sale, redemption or other taxable disposition of a note equal to the difference between the amount realized (less accrued interest, if not previously included in income, which will be taxable as such) upon such sale, redemption or other taxable disposition and such U.S. holder's adjusted

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tax basis in the note. A U.S. holder's tax basis in a note will generally be equal to the amount that such U.S. holder paid for the note. Any gain or loss recognized on a taxable disposition of the note will be capital gain or loss. If, at the time of the sale, redemption or other taxable disposition of the note, a U.S. holder is treated as holding the note for more than one year, such capital gain or loss will be a long-term capital gain or loss. In the case of certain non-corporate U.S. holders (including individuals), long-term capital gain generally is subject to U.S. federal income tax at a lower rate than short-term capital gain, which is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations.

Conversion of Convertible Notes

A U.S. holder's conversion of a note into our common stock generally will not be a taxable event, except to the extent the stock received is attributable to accrued interest not previously included in income, the fair market value of which is taxable as interest income as discussed above under "Consequences to U.S. Holders Taxation of Interest", and that the receipt of cash in lieu of a fractional share of our common stock will result in capital gain or loss (measured by the difference between the cash received in lieu of the fractional share and the U.S. holder's tax basis attributable to the fractional share).

A U.S. holder's tax basis in our common stock received upon a conversion of a note (except for any stock received attributable to accrued interest) will be the same as the U.S. holder's tax basis in the note at the time of the conversion, reduced by any basis attributable to a fractional share. The U.S. holder's holding period for the common stock received (except for any stock received attributable to accrued interest) will include the holding period of the note converted.

A U.S. holder's tax basis in any stock received attributable to accrued interest will equal the fair market value of the stock at the time of the conversion, and the U.S. holder's holding period for such stock will begin on the day after the conversion.

Assumption of our Obligations under the Convertible Notes

Under certain circumstances described under the heading "Description of the Convertible Notes Consolidation, Merger and Sale of Assets," our obligations under the convertible notes and the indenture may be assumed by another person. An assumption by another person of our obligations under the convertible notes and the indenture might be deemed for U.S. federal income tax purposes to be an exchange by a holder of the convertible notes for new convertible notes, resulting in recognition of gain or loss for such purposes and possibly other adverse tax consequences to the holder. Holders should consult their own tax advisor regarding the tax consequences of such an assumption.

Distributions on Common Stock

If a U.S. holder converts a convertible note into shares of our common stock and we make a distribution in respect of that stock, the distribution generally will be included in the U.S. holder's income as ordinary dividend income to the extent of our current and accumulated earnings and profits. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. holder's adjusted tax basis in the common stock and thereafter as capital gain from the sale or exchange of such common stock. With respect to dividends received by certain non-corporate U.S. holders, for taxable years beginning before January 1, 2013, the lower applicable long-term capital gains rates may apply if certain holding period and other requirements are satisfied. Dividends received by corporate U.S. holders may be eligible for a dividends-received deduction, subject to applicable limitations.

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Constructive Distributions

The conversion rate of the convertible notes will be adjusted in certain circumstances, as described in "Description of the Convertible Notes Conversion of Convertible Notes Conversion Rate Adjustments" and "Description of the Convertible Notes Adjustments to Shares Delivered upon Conversion upon a Make Whole Adjustment Event." Adjustments (or failures to make adjustments) that have the effect of increasing a U.S. holder's proportionate interest in our assets or earnings may in some circumstances result in a deemed distribution to a U.S. holder for U.S. federal income tax purposes. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that have the effect of preventing the dilution of the interest of the holders of the convertible notes, however, will generally not be considered to result in a deemed distribution to a U.S. holder. Certain of the possible conversion rate adjustments provided in the convertible notes (including, without limitation, adjustments in respect of taxable dividends to holders of our common stock and adjustments to the conversion rate upon a make whole adjustment event) may not qualify as being pursuant to a bona fide reasonable adjustment formula. If such an adjustment is made and does not so qualify, a U.S. holder generally will be deemed to have received a distribution even if the U.S. holder has not received any cash or property as a result of such adjustment. Any deemed distribution will be taxable as a dividend, return of capital, or capital gain in accordance with the description above under "Consequences to U.S. Holders Distributions on Common Stock." It is not clear whether a constructive dividend deemed paid to a U.S. holder would be eligible for the preferential rates of U.S. federal income tax applicable in respect of certain dividends received. It is also unclear whether corporate holders would be entitled to claim the dividends-received deduction with respect to any such constructive dividends. Because a constructive dividend deemed received by a U.S. holder would not give rise to any cash from which any applicable withholding tax could be satisfied, if we pay backup withholding taxes on behalf of a U.S. holder (because such U.S. holder failed to establish an exemption from backup withholding taxes), we may, at our option, set-off any such payment against payments of cash and common stock payable on the convertible notes.

Sale, Certain Redemptions or Other Taxable Disposition of Common Stock

Upon a sale, certain redemptions or other taxable disposition of our common stock, a U.S. holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property received upon such disposition and (ii) the U.S. holder's adjusted tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if a U.S. holder's holding period in the common stock is more than one year at the time of the taxable disposition. In the case of certain non-corporate U.S. holders (including individuals), long-term capital gain generally is subject to U.S. federal income tax at a lower rate than short-term capital gain, which is taxed at ordinary income rates. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to payments of interest on the convertible notes and dividends on shares of common stock and to the proceeds of a sale of a note or share of common stock paid to a U.S. holder unless the U.S. holder is an exempt recipient. A backup withholding tax will apply to those payments if the U.S. holder fails to provide its correct taxpayer identification number, or certification of exempt status, or if the U.S. holder is notified by the IRS that it has failed to report in full payments of interest and dividend income. Any amounts withheld under the backup withholding rules will be allowed

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as a refund or a credit against a U.S. holder's U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Consequences to Non-U.S. Holders

Payments of Interest

A non-U.S. holder will not be subject to U.S. federal withholding tax or income tax with respect to any payment of interest to a non-U.S. holder provided that:

interest paid on the note is not effectively connected with the non-U.S. holder's conduct of a trade or business in the United States;

the non-U.S. holder does not actually or constructively own 10% or more of the total combined voting power of all classes of our stock that are entitled to vote within the meaning of section 871(h)(3) of the Code;

the non-U.S. holder is not a controlled foreign corporation that is related to us (actually or constructively) through stock ownership;

the non-U.S. holder is not a bank whose receipt of interest on a note is described in section 881(c)(3)(A) of the Code; and

(a) the non-U.S. holder provides its name and address, and certifies, under penalties of perjury, that it is not a U.S. person (which certification may be made on an IRS Form W-8BEN or other applicable form) or (b) the non-U.S. holder holds the convertible notes through certain foreign intermediaries or certain foreign partnerships, and the non-U.S. holder and the foreign intermediary or foreign partnership satisfies the certification requirements of applicable Treasury regulations. Special certification rules apply to non-U.S. holders that are pass-through entities.

If a non-U.S. holder cannot satisfy the requirements described above, payments of interest will be subject to the 30% U.S. federal withholding tax, unless the non-U.S. holder provides us with a properly executed (i) IRS Form W-8BEN (or other applicable form) claiming an exemption from or reduction in withholding under the benefit of an applicable income tax treaty or (ii) IRS Form W-8ECI (or other applicable form) stating that interest paid on the convertible notes is not subject to withholding tax because it is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States. If a non-U.S. holder is engaged in a trade or business in the United States and interest on the convertible notes is effectively connected with the conduct of that trade or business and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment, then, although the non-U.S. holder will be exempt from the 30% withholding tax provided the certification requirements discussed above are satisfied, the non-U.S. holder will be subject to U.S. federal income tax on that interest on a net income basis in the same manner as if the non-U.S. holder were a U.S. holder. In addition, if a non-U.S. holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or lesser rate under an applicable income tax treaty) of its earnings and profits for the taxable year, subject to adjustments, that are effectively connected with its conduct of a trade or business in the United States.

Dividends and Constructive Distributions

Any dividends paid to a non-U.S. holder with respect to the shares of common stock (and any deemed dividends resulting from certain adjustments, or failure to make adjustments, to the conversion rate, see "Consequences to U.S. Holders Constructive Distributions" above) will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. However, dividends that are effectively connected with the

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conduct of a trade or business within the United States and, where a tax treaty applies, are attributable to a U.S. permanent establishment, are not subject to the withholding tax, but instead are subject to U.S. federal income tax on a net income basis in the same manner as if the non-U.S. holder were a U.S. holder. In addition, any such effectively connected income received by a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

As discussed under " Consequences to Non-U.S. Holders Payments of Interest" certain certification requirements and disclosure requirements must be complied with in order to claim the benefit of an applicable treaty rate or for effectively connected income to be exempt from withholding. Because a constructive dividend deemed received by a non-U.S. holder would not give rise to any cash from which any applicable withholding tax could be satisfied, if we pay withholding taxes on behalf of a non-U.S. holder, we may, at our option, set-off any such payment against payments of cash and common stock payable on the convertible notes. A non-U.S. holder may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Sale, Certain Redemptions or Other Taxable Dispositions of Convertible Notes or Shares of Common Stock

Gain realized by a non-U.S. holder on a sale, certain redemptions or other taxable disposition of common stock or a note will not be subject to U.S. federal income tax unless:

that gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States (and, if required by an applicable income treaty, is attributable to a U.S. permanent establishment);

the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition and certain other conditions are met; or

we are or have been a "U.S. real property holding corporation" for U.S. federal income tax purposes. Although there can be no assurance, we believe that we are not, and we do not anticipate becoming, a U.S. real property holding corporation for U.S. federal income tax purposes.

If a non-U.S. holder is described in the first bullet point above, it will be subject to tax on the net gain derived from the sale, redemption, conversion or other taxable disposition under regular graduated U.S. federal income tax rates and in the same manner as if the non-U.S. holder were a U.S. holder. In addition, if a non-U.S. holder is a foreign corporation, it may be subject to the branch profits tax equal to 30% of its effectively connected earnings and profits for that taxable year, or at such lower rate as may be specified by an applicable income tax treaty. If a non-U.S. holder is an individual described in the second bullet point above, such holder will be subject to a flat 30% tax on the gain derived from the sale, redemption, conversion or other taxable disposition, which may be offset by U.S. source capital losses, even though such holder is not considered a resident of the United States.

Any gain recognized by a non-U.S. holder upon the conversion of a note as a result of the receipt of cash in lieu of a fractional share of our common stock will be subject to U.S. federal income tax in accordance with the above rules. Any common stock which a non-U.S. holder receives on the conversion of a note that is attributable to accrued interest will be subject to U.S. federal income tax in accordance with the rules for taxation of interest described above under " Consequences to Non-U.S. Holders Payments of Interest."

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Information Reporting and Backup Withholding

Generally, we must report annually to the IRS and to non-U.S. holders the amount of interest and dividends paid to non-U.S. holders and the amount of tax, if any, withheld with respect to those payments. Copies of the information returns reporting such interest, dividends and withholding may also be made available to the tax authorities in the country in which a non-U.S. holder resides under the provisions of an applicable income tax treaty.

In general, a non-U.S. holder will not be subject to backup withholding with respect to payments of interest or dividends that we make, provided the statement described above in the last bullet point under "Consequences to Non-U.S. Holders Payments of Interest" has been received and we do not have actual knowledge or reason to know that the holder is a U.S. person, as defined under the Code, who is not an exempt recipient. However, a non-U.S. holder will be subject to information reporting and, depending on the circumstances, backup withholding with respect to payments of the proceeds of the sale of a note or share of our common stock within the United States or conducted through certain U.S.-related financial intermediaries, unless the statement described above has been received, and we do not have actual knowledge or reason to know that a holder is a U.S. person, as defined under the Code, who is not an exempt recipient, or the non-U.S. holder otherwise establishes an exemption. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Recent Legislative Developments

Recently enacted legislation, that is effective for amounts paid after December 31, 2012, generally will impose a withholding tax of 30% on any dividends on our common stock paid to a foreign financial institution, unless such institution enters into an agreement with the U.S. government to, among other things, collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). The legislation will also generally impose a withholding tax of 30% on any dividends on our common stock paid to a non-financial foreign entity unless such entity provides the withholding agent with either certification that such entity does not have any substantial United States owners or identification of the direct and indirect substantial U.S. owners of the entity. Finally, withholding of 30% also generally will apply to the gross proceeds of a disposition of our common stock paid to a foreign financial institution or to a non-financial foreign entity unless the reporting and certification requirements described above have been met. Under certain circumstances, a non-U.S. holder of our common stock may be eligible for refunds or credits of such taxes. Prospective non-U.S. holders are encouraged to consult with their tax advisors regarding the possible implications of this legislation on their investment in our common stock.

This recent legislation contains an exception that provides that the new withholding tax will not apply to payments made on debt instruments, such as the convertible notes, that are outstanding on March 18, 2012. This exception would not apply to payments on our shares of common stock. Because this legislation is new and the U.S. Treasury Department has broad authority to interpret these rules and promulgate regulations, holders should consult their own tax advisors regarding the relevance of this legislation to their investment in the convertible notes.

Table of Contents**UNDERWRITING**

Subject to the terms and conditions of the underwriting agreement, the underwriters named below, through their representatives Deutsche Bank Securities Inc., Goldman, Sachs & Co., Morgan Stanley & Co. Incorporated, Barclays Capital Inc., Lazard Capital Markets LLC and Pacific Crest Securities LLC have severally agreed to purchase from us the following respective principal amounts of convertible notes listed opposite their name below at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement:

Principal Underwriters	Principal Amount of Convertible Notes
Deutsche Bank Securities Inc.	\$
Goldman, Sachs & Co.	
Morgan Stanley & Co. Incorporated	
Barclays Capital Inc.	
Lazard Capital Markets LLC	
Pacific Crest Securities LLC	
Total	\$

The underwriting agreement provides that the obligations of the several underwriters to purchase the convertible notes offered hereby are subject to certain conditions precedent and that the underwriters will purchase all of the convertible notes offered by this prospectus supplement, other than those covered by the option to purchase additional convertible notes described below, if any of these convertible notes are purchased.

We have been advised by the representatives of the underwriters that the underwriters propose to offer the convertible notes to the public at the public offering price set forth on the cover of this prospectus supplement and to dealers at a price that represents a concession not in excess of % of the principal amount of the convertible notes. The underwriters may allow, and these dealers may re-allow, a concession of not more than % of the principal amount of the convertible notes to other dealers. After the initial public offering, representatives of the underwriters may change the offering price and other selling terms. The offering of the convertible notes by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We have granted to the underwriters an option, exercisable not later than 30 days after the date of this prospectus supplement, to the extent the underwriters sell more than \$125,000,000 in principal amount of convertible notes, to purchase up to \$18,750,000 aggregate principal amount of additional convertible notes at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement. To the extent that the underwriters exercise this option, each of the underwriters will become obligated, subject to conditions, to purchase approximately the same percentage of these additional convertible notes as the number of convertible notes to be purchased by it in the above table bears to the total number of convertible notes offered by this prospectus supplement. We will be obligated, pursuant to the option, to sell these additional convertible notes to the underwriters to the extent the option is exercised. If any additional convertible notes are purchased, the underwriters will offer the additional convertible notes on the same terms as those on which the convertible notes are being offered.

In addition, we estimate that our share of the total expenses of this convertible notes offering, excluding underwriting discounts and commissions, will be approximately \$3.8 million.

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We have agreed to indemnify the several underwriters against some specified types of liabilities, including liabilities under the U.S. Securities Act of 1933, as amended, and to contribute to payments the underwriters may be required to make in respect of any of these liabilities.

Concurrently with the issuance of the convertible notes, we are offering 18,000,000 shares of our common stock. The underwriters of this offering are also acting as the underwriters of the concurrent offering, and we have granted Deutsche Bank Securities Inc. and Goldman, Sachs & Co., as managers of the underwriters in the concurrent offering, an option to purchase up to 2,700,000 additional shares of common stock. Closing of this convertible notes offering and closing of the concurrent common stock offering are not conditioned on each other.

We and each of our executive officers and directors, and certain entities affiliated with our directors, have agreed that, without the prior written consent of Deutsche Bank Securities Inc. and Goldman, Sachs & Co. on behalf of the underwriters, we and they will not, during the period ending 90 days after the date of this prospectus supplement:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities, directly or indirectly, convertible into or exercisable or exchangeable for shares of common stock;

in our case, file any registration statement with the SEC relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock, except for a registration statement on Form S-8; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, each such person agrees that, without the prior written consent of Deutsche Bank Securities Inc. and Goldman, Sachs & Co. on behalf of the underwriters, it will not, during the period ending 90 days after the date of this prospectus supplement, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph shall not apply to:

the sale of shares of common stock to the underwriters pursuant to the underwriting agreement in connection with the concurrent common stock offering;

the issuance by us of common stock upon conversion of the convertible notes;

the issuance by us of shares of common stock upon exercise of an option or warrant, or the conversion of a security outstanding on the date of the closing of this offering;

the one-time issuance by us of up to a number of shares of common stock equal to \$5,000,000 divided by the last reported sale price of our common stock on The NASDAQ Global Select Market on each of the twenty days immediately preceding the date of issuance; provided (i) such issuance is pursuant to a collaborative, licensing or marketing agreements or in connection with any other strategic transaction and (ii) that the recipient of such shares has previously signed a lock-up agreement providing that none of the shares shall be sold prior to May 18, 2011 and, on or after May 18, 2011, no

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more than 10% of the shares so issued shall be sold in any single day during the restricted period;

the one-time issuance by us of up to a number of shares of common stock equal to \$25,000,000 divided by the average of the last reported sale price of common stock on The NASDAQ Global Select Market on each of the twenty (20) days immediately preceding the date of issuance; provided (i) such issuance is pursuant to a collaborative, licensing or marketing agreement or in connection with any other strategic transaction and (ii) that the recipient of such shares has previously signed a lock-up agreement on substantially the same terms as described herein;

any agreement by us to sell shares of common stock, provided (i) such agreement is pursuant to a collaborative, licensing or marketing agreement or in connection with any other strategic transaction, (ii) that the issuance of such shares of common stock does not occur until the expiration of the period ending 90 days after the date of this prospectus supplement and (iii) the party to such agreement has previously signed a lock-up agreement on substantially the same terms as described herein;

the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that such plan does not provide for the transfer of common stock during the restricted period;

transfers of shares of common stock pursuant to a written contract, instruction or plan complying with Rule 10b5-1 under the Exchange Act, provided that (i) a copy of such plan is provided to the underwriters prior to the date of the underwriting agreement and (ii) such plan is not amended or modified during the restricted period;

transactions by any person other than us relating to shares of common stock or other securities acquired in open market transactions after the completion of this offering;

the issuance of shares in the concurrent common stock offering;

the grant by us of additional employee stock options and restricted stock units under plans existing and in effect on the date of this prospectus supplement;

transfers by any person other than us of shares of common stock or other securities as a bona fide gift or in connection with bona fide estate planning or distributions by any person other than by us of shares of common stock or other securities to limited partners, members or stockholders of such person, provided that each donee or distributee has previously signed a lock-up agreement on substantially the same terms as described herein; or

the exercise of an option to purchase shares of common stock granted by us under a stock incentive plan or stock purchase plan or the disposition of shares of restricted stock to us pursuant to the terms of such plan;

provided, in the case of the two immediately preceding bullet points, that no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of common stock, will be required or will be made during the restricted period.

The convertible notes are a new issue of securities with no established trading market. The convertible notes will not be listed on any securities exchange or on any automated dealer quotation system. The underwriters may make a market in the convertible notes after completion of the offering, but will not be obligated to do so and may discontinue any market-making activities at any time without notice. No assurance can be given as to the liquidity of the trading market for the convertible notes or that an active public market for the

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convertible notes will develop. If an active public trading market for the convertible notes does not develop, the market price and liquidity of the convertible notes may be adversely affected.

In connection with the offering, the underwriters may purchase and sell the convertible notes and our common stock in the open market. These transactions may include short sales, purchases to cover positions created by short sales and stabilizing transactions.

Short sales involve the sale by the underwriters of a greater principal amount of convertible notes than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the underwriters' option to purchase additional convertible notes from us in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional convertible notes or purchasing convertible notes in the open market. In determining the source of convertible notes to close out the covered short position, the underwriters will consider, among other things, the price of convertible notes available for purchase in the open market as compared to the price at which they may purchase convertible notes through the option to purchase additional convertible notes.

Naked short sales are any sales in excess of the option to purchase additional convertible notes. The underwriters must close out any naked short position by purchasing convertible notes in the open market. A naked short position is more likely to be created if underwriters are concerned that there may be downward pressure on the price of the convertible notes in the open market prior to the completion of the offering.

Stabilizing transactions consist of various bids for or purchases of the convertible notes made by the underwriters in the open market prior to the completion of the offering.

The underwriters may impose a penalty bid. This occurs when a particular underwriter repays to the other underwriters a portion of the underwriting discount received by it because the representatives of the underwriters have repurchased convertible notes sold by or for the account of that underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or slowing a decline in the market price of the convertible notes. Additionally, these purchases, along with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the convertible notes. As a result, the price of the convertible notes and our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected in the over-the-counter market or otherwise.

A prospectus supplement in electronic format is being made available on Internet web sites maintained by one or more of the lead underwriters of this offering and may be made available on web sites maintained by other underwriters. Other than the prospectus supplement in electronic format, the information on any underwriter's web site and any information contained in any other web site maintained by an underwriter is not part of the prospectus or the registration statement of which the prospectus forms a part.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the issuer, for which they received or will receive customary fees and expenses.

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In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the issuer. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Lazard Frères & Co. LLC referred this transaction to Lazard Capital Markets LLC and will receive a referral fee from Lazard Capital Markets LLC in connection therewith.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of convertible notes to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of convertible notes to the public in that Relevant Member State at any time:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the relevant dealer or dealers nominated by the issuer for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of convertible notes shall require the issuer or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of convertible notes to the public" in relation to any convertible notes in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the convertible notes to be offered so as to enable an investor to decide to purchase or subscribe the convertible notes, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

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Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the convertible notes in circumstances in which Section 21(1) of the FSMA does not apply to the issuer; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the convertible notes in, from or otherwise involving the United Kingdom.

The convertible notes may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the convertible notes may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to convertible notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the convertible notes may not be circulated or distributed, nor may the convertible notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the convertible notes are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an

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accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the convertible notes under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

LEGAL MATTERS

The validity of the convertible notes offered hereby will be passed upon for us by Latham & Watkins LLP, Boston, Massachusetts. Ropes & Gray LLP has acted as counsel for the underwriters in connection with certain legal matters related to this offering.

EXPERTS

The financial statements of A123 Systems, Inc. as of December 31, 2010 and 2009, and for each of the three years in the period ended December 31, 2010, incorporated by reference in this prospectus, and the effectiveness of A123 Systems, Inc.'s internal control over financial reporting as of December 31, 2010 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports (which reports express an unqualified opinion on the financial statements, and an adverse opinion on the effectiveness of internal control over financial reporting due to a material weakness), which are incorporated by reference herein. Such financial statements have been incorporated in reliance upon the reports of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN YOU FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Copies of certain information filed by us with the SEC are also available on our website at <http://www.a123systems.com>. Our website is not a part of this prospectus supplement and is not incorporated by reference herein. You may also read and copy any document we file at the SEC, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information.

This prospectus supplement and the accompanying prospectus are part of a registration statement we filed with the SEC. This prospectus supplement and the accompanying prospectus omit some information contained in the registration statement in accordance with SEC rules and regulations. You should review the accompanying prospectus and the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus supplement concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

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INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus supplement and the accompanying prospectus is considered to be part of this prospectus supplement and the accompanying prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus supplement and the accompanying prospectus are continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus supplement and the accompanying prospectus. This means that you must carefully review all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement, the accompanying prospectus or in any document previously incorporated by reference have been modified or superseded. However, we undertake no obligation to update or revise any statements we make, except as required by law. This prospectus supplement and the accompanying prospectus incorporate by reference the documents listed below (File No. 0001-34463) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the convertible notes under the registration statement is terminated or completed:

Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed with the SEC on March 11, 2011;

Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 29, 2010 (excluding those portions that are not incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2009);

Current Reports on Form 8-K filed on January 14, 2011 and March 28, 2011; and

The description of our common stock contained in our Registration Statement on Form 8-A filed on September 18, 2009, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

A123 Systems, Inc.
200 West Street
Waltham, Massachusetts 02451
Attention: Investor Relations Department
(617) 972-3450

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PROSPECTUS

A123 SYSTEMS, INC.

Common Stock Preferred Stock Debt Securities Warrants Units

We or selling securityholders may offer the securities described in this prospectus from time to time in one or more transactions. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any applicable prospectus supplement before you invest.

We may offer these securities in amounts, at prices and on terms determined at the time of offering. The securities may be sold directly to you, through agents, or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement.

Our common stock is traded on The NASDAQ Global Select Market under the symbol "AONE."

Investing in our securities involves risks. See "Item 1A. Risk Factors" in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus, and "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 28, 2011.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we or selling securityholders may from time to time sell any of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we or selling securityholders may offer. Each time we or selling securityholders sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the accompanying prospectus supplement together with the additional information described under the heading "Where You Can Find More Information" beginning on page 2 of this prospectus before making an investment decision.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of any offer to buy any securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to "we," "our" and "us" refer, collectively, to A123 Systems, Inc., a Delaware corporation, and its consolidated subsidiaries.

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.a123systems.com. Our website is not a part of this prospectus and is not incorporated by reference herein. You may also read and copy any document we file at the SEC, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must carefully review all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. However, we undertake no obligation to update or revise any statements we make, except as required by law. This prospectus incorporates by reference the documents listed below (File No. 001-34463) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed with the SEC on March 11, 2011;

Definitive Proxy Statement on Schedule 14A filed with the SEC on April 29, 2010 (excluding those portions that are not incorporated by reference in our Annual Report on Form 10-K for the fiscal year ended December 31, 2009).

Current Report on Form 8-K filed with the SEC on January 14, 2011; and

The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on September 18, 2009, including any amendments or reports filed for the purpose of updating such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

A123 Systems, Inc.
200 West Street
Waltham, Massachusetts 02451
Attention: Investor Relations Department
(617) 972-3450

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FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include "forward-looking statements" within the meaning of U.S. securities law. These statements are based on current expectations, estimates, forecasts and projections about the industry in which we operate and the beliefs and assumptions of our management, and as such are inherently uncertain. These forward-looking statements include, but are not limited to, statements relating to: our ability to obtain new customers and supply agreements; our beliefs about future trends in our market; our financial and business projections; worldwide political, economic or business conditions; foreign currency exchange rates; competition in our industry; delays in customer and market demand for our products and solutions; and delays in the development, production and delivery of our products and solutions. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends," "plans," "believes," "seeks," "estimates," "continues" and "may" and variations of such words and similar expressions are intended to identify such forward-looking statements. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, which in some cases may be based on our growth strategies and anticipated trends in our business. These statements are only predictions based at the time they are made on our expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements. In particular, you should consider the numerous risks outlined in the section of any accompanying prospectus supplement entitled "Risk Factors" and the risk factors and cautionary statements described in the other documents we file from time to time with the SEC, specifically under "Item 1A. Risk Factors" and elsewhere in our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

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A123 SYSTEMS, INC.

We design, develop, manufacture and sell advanced, rechargeable lithium-ion batteries and energy storage systems. We believe that lithium-ion batteries will play an increasingly important role in facilitating a shift toward cleaner forms of energy. Using our innovative approach to materials science and battery engineering and our systems integration and manufacturing capabilities, we have developed a broad family of high-power lithium-ion batteries and battery systems. This family of products, combined with our strategic partner relationships in the transportation, electric grid services and commercial markets, positions us well to address these markets for next-generation energy storage solutions.

Our principal executive offices are located at 200 West Street, Waltham, Massachusetts 02451, and our telephone number is (617) 778-5700.

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CONSOLIDATED RATIOS OF EARNINGS TO FIXED CHARGES

We recorded a net loss from continuing operations for each of the five years in the period ended December 31, 2010. As a result, earnings were insufficient to cover fixed charges by \$151.1 million for the fiscal year ended December 31, 2010, \$86.3 million for the fiscal year ended December 31, 2009, \$80.2 million for the fiscal year ended December 31, 2008, \$30.9 million for the fiscal year ended December 31, 2007 and \$15.7 million for the fiscal year ended December 31, 2006.

For the purpose of these computations, we have calculated earnings as the sum of pretax loss from continuing operations before loss from equity investees and fixed charges. Fixed charges consist of interest expense and the interest portion of rent expense which is deemed to be representative of the interest factor.

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USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered by us under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include the acquisition of companies or businesses, repayment and refinancing of debt, working capital and capital expenditures. We may temporarily invest the net proceeds in investment-grade, interest-bearing securities until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

We will not receive any proceeds from the sale of securities by any selling securityholders unless otherwise indicated in the applicable prospectus supplement.

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GENERAL DESCRIPTION OF SECURITIES

We or the selling securityholders may offer under this prospectus:

common stock;

preferred stock;

debt securities;

warrants to acquire common stock, preferred stock or debt securities; or

any combination of the foregoing, either individually or as units consisting of two or more securities.

The following description of the terms of these securities sets forth some of the general terms and provisions of securities that may be offered. The particular terms of securities offered by any prospectus supplement and the extent, if any, to which the general terms set forth below do not apply to those securities, will be described in the related prospectus supplement. In addition, if we offer securities as units, the terms of the units will be described in the applicable prospectus supplement. If the information contained in the prospectus supplement differs from the following description, you should rely on the information in the prospectus supplement.

Whenever references are made in this prospectus to information that will be included in a prospectus supplement, to the extent permitted by applicable law, rules or regulations, we may instead include such information or add, update or change the information contained in this prospectus by means of a post-effective amendment to the registration statement of which this prospectus is a part, through filings we make with the SEC that are incorporated by reference in this prospectus or by any other method as may be permitted under applicable law, rules or regulations.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes information about our capital stock. You can obtain more comprehensive information about our capital stock by consulting our certificate of incorporation and by-laws, which are incorporated by reference in this prospectus, as well as the Delaware General Corporation Law. Our authorized capital stock consists of 250,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. As of March 25, 2011, 105,733,429 shares of our common stock were outstanding and no shares of our preferred stock were outstanding.

Common Stock

Annual Meeting. Annual meetings of our stockholders are held on the date designated in accordance with our by-laws. Written notice must be mailed to each stockholder entitled to vote not less than 10 nor more than 60 days before the date of the meeting. The presence in person or by proxy of the holders of record of a majority of our issued and outstanding shares entitled to vote at such meeting constitutes a quorum for the transaction of business at meetings of the stockholders. Special meetings of the stockholders may be called for any purpose by our board of directors, chairman of our board or our chief executive officer. Except as may be otherwise provided by applicable law, our restated certificate of incorporation or our by-laws, all elections shall be decided by a plurality, and all other questions shall be decided by a majority, of the votes cast by stockholders entitled to vote thereon at a duly held meeting of stockholders at which a quorum is present.

Voting Rights. Each holder of common stock is entitled to one vote for each share held on all matters to be voted upon by stockholders.

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Dividends. The holders of common stock, after any preferences of holders of any preferred stock, are entitled to receive dividends when and if declared by the board of directors out of legally available funds.

Liquidation and Dissolution. If we are liquidated or dissolved, the holders of the common stock will be entitled to share in our assets available for distribution to stockholders in proportion to the amount of common stock they own subject to any preferential or other rights of any preferred stock.

Other Rights. Holders of the common stock have no right to:

convert the stock into any other security;

have the stock redeemed; or

purchase additional stock or to maintain their proportionate ownership interest.

The common stock does not have cumulative voting rights. Holders of shares of the common stock are not required to make additional capital contributions.

Transfer Agent and Registrar. American Stock Transfer & Trust Co. is the transfer agent and registrar for our common stock.

Preferred Stock

As of March 25, 2011, no shares of preferred stock were outstanding. Other terms of any series of preferred stock will be described in the prospectus supplement relating to that series of preferred stock. The terms of any series of preferred stock may differ from the terms described below. Certain provisions of the preferred stock described below and in any applicable prospectus supplement are not complete.

We are authorized to issue "blank check" preferred stock, which may be issued in one or more series upon authorization of our board of directors. Our board of directors is authorized to fix the designation of the series, the number of authorized shares of the series, dividend rights and terms, conversion rights, voting rights, redemption rights and terms, liquidation preferences and any other rights, powers, preferences and limitations applicable to each series of preferred stock. The authorized shares of our preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange on which our securities may be listed. If the approval of our stockholders is not required for the issuance of shares of our preferred stock, our board of directors may determine not to seek stockholder approval.

A series of our preferred stock could, depending on the terms of such series, impede the completion of a merger, tender offer or other takeover attempt. Our board of directors will make any determination to issue such shares based upon its judgment as to the best interests of our stockholders. Our directors, in so acting, could issue preferred stock having terms that could discourage an acquisition attempt through which an acquirer may be able to change the composition of our board of directors, including a tender offer or other transaction that some, or a majority, of our stockholders might believe to be in their best interests or in which stockholders might receive a premium for their stock over the then-current market price of the stock.

The preferred stock has the terms described below unless otherwise provided in the prospectus supplement relating to a particular series of preferred stock. You should read the prospectus supplement relating to the particular series of preferred stock being offered for specific terms, including:

the designation and stated value per share of the preferred stock and the number of shares offered;

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the amount of liquidation preference per share;

the price at which the preferred stock will be issued;

the dividend rate, or method of calculation of dividends, the dates on which dividends will be payable, whether dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will commence to accumulate;

any redemption or sinking fund provisions;

any conversion provisions; and

any other rights, preferences, privileges, limitations and restrictions on the preferred stock.

The preferred stock will, when issued, be fully paid and nonassessable. Unless otherwise specified in the prospectus supplement, each series of preferred stock will rank equally as to dividends and liquidation rights in all respects with each other series of preferred stock. The rights of holders of shares of each series of preferred stock will be subordinate to those of our general creditors.

Rank. Unless otherwise specified in the prospectus supplement, the preferred stock will, with respect to dividend rights and rights upon our liquidation, dissolution or winding up of its affairs, rank:

senior to our common stock and to all equity securities ranking junior to such preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs;

on a parity with all equity securities issued by us, the terms of which specifically provide that such equity securities rank on a parity with the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs; and

junior to all equity securities issued by us, the terms of which specifically provide that such equity securities rank senior to the preferred stock with respect to dividend rights or rights upon our liquidation, dissolution or winding up of our affairs.

The term "equity securities" does not include convertible debt securities.

Dividends. Holders of the preferred stock of each series will be entitled to receive, when, as and if declared by our board of directors, cash dividends at such rates and on such dates described in the prospectus supplement. Different series of preferred stock may be entitled to dividends at different rates or based on different methods of calculation. The dividend rate may be fixed or variable or both. Dividends will be payable to the holders of record as they appear on our stock books on record dates fixed by our board of directors, as specified in the applicable prospectus supplement.

Dividends on any series of preferred stock may be cumulative or noncumulative, as described in the applicable prospectus supplement. If our board of directors does not declare a dividend payable on a dividend payment date on any series of noncumulative preferred stock, then the holders of that noncumulative preferred stock will have no right to receive a dividend for that dividend payment date, and we will have no obligation to pay the dividend accrued for that period, whether or not dividends on that series are declared payable on any future dividend payment dates. Dividends on any series of cumulative preferred stock will accrue from the date we initially issue shares of such series or such other date specified in the applicable prospectus supplement.

No dividends may be declared or paid or funds set apart for the payment of any dividends on any parity securities unless full dividends have been paid or set apart for payment on the preferred stock. If full dividends are not paid, the preferred stock will share dividends pro rata with the parity securities.

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No dividends may be declared or paid or funds set apart for the payment of dividends on any junior securities unless full dividends for all dividend periods terminating on or prior to the date of the

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declaration or payment will have been paid or declared and a sum sufficient for the payment set apart for payment on the preferred stock.

Liquidation Preference. Upon any voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before we make any distribution or payment to the holders of any common stock or any other class or series of our capital stock ranking junior to the preferred stock in the distribution of assets upon any liquidation, dissolution or winding up of our affairs, the holders of each series of preferred stock shall be entitled to receive out of assets legally available for distribution to stockholders, liquidating distributions in the amount of the liquidation preference per share set forth in the prospectus supplement, plus any accrued and unpaid dividends thereon. Such dividends will not include any accumulation in respect of unpaid noncumulative dividends for prior dividend periods. Unless otherwise specified in the prospectus supplement, after payment of the full amount of their liquidating distributions, the holders of preferred stock will have no right or claim to any of our remaining assets. Upon any such voluntary or involuntary liquidation, dissolution or winding up, if our available assets are insufficient to pay the amount of the liquidating distributions on all outstanding preferred stock and the corresponding amounts payable on all other classes or series of our capital stock ranking on parity with the preferred stock and all other such classes or series of shares of capital stock ranking on parity with the preferred stock in the distribution of assets, then the holders of the preferred stock and all other such classes or series of capital stock will share ratably in any such distribution of assets in proportion to the full liquidating distributions to which they would otherwise be entitled.

Upon any such liquidation, dissolution or winding up and if we have made liquidating distributions in full to all holders of preferred stock, we will distribute our remaining assets among the holders of any other classes or series of capital stock ranking junior to the preferred stock according to their respective rights and preferences and, in each case, according to their respective number of shares. For such purposes, our consolidation or merger with or into any other corporation, trust or entity, or the sale, lease or conveyance of all or substantially all of our property or assets will not be deemed to constitute a liquidation, dissolution or winding up of our affairs.

Redemption. If so provided in the applicable prospectus supplement, the preferred stock will be subject to mandatory redemption or redemption at our option, as a whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such prospectus supplement.

The prospectus supplement relating to a series of preferred stock that is subject to mandatory redemption will specify the number of shares of preferred stock that shall be redeemed by us in each year commencing after a date to be specified, at a redemption price per share to be specified, together with an amount equal to all accrued and unpaid dividends thereon to the date of redemption. Unless the shares have a cumulative dividend, such accrued dividends will not include any accumulation in respect of unpaid dividends for prior dividend periods. We may pay the redemption price in cash or other property, as specified in the applicable prospectus supplement. If the redemption price for preferred stock of any series is payable only from the net proceeds of the issuance of shares of our capital stock, the terms of such preferred stock may provide that, if no such shares of our capital stock shall have been issued or to the extent the net proceeds from any issuance are insufficient to pay in full the aggregate redemption price then due, such preferred stock shall automatically and mandatorily be converted into the applicable shares of our capital stock pursuant to conversion provisions specified in the applicable prospectus supplement. Notwithstanding the foregoing, we will not redeem any preferred stock of a series unless:

if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on the preferred stock for all past dividend periods and the then current dividend period; or

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if such series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends for the then current dividend period.

In addition, we will not acquire any preferred stock of a series unless:

if that series of preferred stock has a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full cumulative dividends on all outstanding shares of such series of preferred stock for all past dividend periods and the then current dividend period; or

if that series of preferred stock does not have a cumulative dividend, we have declared and paid or contemporaneously declare and pay or set aside funds to pay full dividends on the preferred stock of such series for the then current dividend period.

However, at any time we may purchase or acquire preferred stock of that series (1) pursuant to a purchase or exchange offer made on the same terms to holders of all outstanding preferred stock of such series or (2) by conversion into or exchange for shares of our capital stock ranking junior to the preferred stock of such series as to dividends and upon liquidation.

If fewer than all of the outstanding shares of preferred stock of any series are to be redeemed, we will determine the number of shares that may be redeemed pro rata from the holders of record of such shares in proportion to the number of such shares held or for which redemption is requested by such holder or by any other equitable manner that we determine. Such determination will reflect adjustments to avoid redemption of fractional shares.

Unless otherwise specified in the prospectus supplement, we will mail notice of redemption at least 30 days but not more than 60 days before the redemption date to each holder of record of preferred stock to be redeemed at the address shown on our stock transfer books. Each notice shall state:

the redemption date;

the number of shares and series of preferred stock to be redeemed;

the redemption price;

the place or places where certificates for such preferred stock are to be surrendered for payment of the redemption price;

that dividends on the shares to be redeemed will cease to accrue on such redemption date;

the date on which the holder's conversion rights, if any, as to such shares shall terminate; and

the specific number of shares to be redeemed from each such holder if fewer than all the shares of any series are to be redeemed.

If notice of redemption has been given and we have set aside the funds necessary for such redemption in trust for the benefit of the holders of any shares called for redemption, then from and after the redemption date, dividends will cease to accrue on such shares, and all rights of the holders of such shares will terminate, except the right to receive the redemption price.

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Voting Rights. Holders of preferred stock will not have any voting rights, except as required by law or as indicated in the applicable prospectus supplement.

Unless otherwise provided for under the terms of any series of preferred stock, no consent or vote of the holders of shares of preferred stock or any series thereof shall be required for any amendment to our restated certificate of incorporation that would increase the number of authorized shares of preferred stock or the number of authorized shares of any series thereof or decrease the number of authorized shares of preferred stock or the number of authorized shares of any series thereof (but not

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below the number of authorized shares of preferred stock or such series, as the case may be, then outstanding).

Conversion Rights. The terms and conditions, if any, upon which any series of preferred stock is convertible into our common stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include the number of shares of common stock into which the shares of preferred stock are convertible, the conversion price, rate or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at our option or at the option of the holders of the preferred stock, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption.

Transfer Agent and Registrar. The transfer agent and registrar for the preferred stock will be set forth in the applicable prospectus supplement.

Delaware Anti-takeover Law and Certain Charter and By-Law Provisions

Delaware Law. We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a "business combination" with any "interested stockholder" for three years following the date that the person became an interested stockholder, unless either (1) the interested stockholder attained such status with the approval of our board of directors, or (2) the business combination is approved by our board of directors and stockholders in a prescribed manner or (3) the interested stockholder acquired at least 85% of our outstanding voting stock in the transaction in which it became an interested stockholder. A "business combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder," the sale of more than 10% of our assets, and other transactions resulting in a financial benefit to the interested stockholder. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person. This provision may discourage or prevent unsolicited tender offers for our outstanding common stock.

Staggered Board. In accordance with the terms of our certificate of incorporation and by-laws, our board of directors is divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms. Our certificate of incorporation provides that the authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. Our certificate of incorporation and by-laws also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of our voting stock, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Our staggered board could have the effect of delaying or discouraging an acquisition of A123 Systems or a change in our management.

Stockholder Action; Special Meeting of Stockholders; Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our certificate of incorporation and by-laws provide that any action required or permitted to be taken by our stockholders at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before such meeting and may not be taken by written action in lieu of a meeting. Our certificate of incorporation and by-laws also provide that, except as otherwise required by law, special meetings of the stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors. In addition, our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to the board of directors. These provisions could have the effect of delaying until the next annual stockholders meeting stockholder actions that are favored by the holders of a majority of our outstanding voting stock. These

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provisions could also discourage a third party from making a tender offer for our common stock, because even if it acquired a majority of our outstanding voting stock, it would be able to take action as a stockholder (such as electing new directors or approving a merger) only at a duly-called stockholders meeting and not by written consent.

Super-Majority Voting. The affirmative vote of the holders of at least 75% of our voting stock is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation or by-laws described in the prior two paragraphs.

Limitation of Liability and Indemnification. Our certificate of incorporation contains provisions permitted under the General Corporation Law of Delaware relating to the liability of directors. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty, except in circumstances involving wrongful acts, such as the breach of a director's duty of loyalty or acts or omissions that involve intentional misconduct or a knowing violation of law. Further, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by the General Corporation Law of Delaware.

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DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to the senior debt securities and the subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered. When we refer to "the Company," "we," "our," and "us" in this section, we mean A123 Systems, Inc. excluding, unless the context otherwise requires or as otherwise expressly stated, our subsidiaries.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

Neither of the indentures will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The senior debt securities will constitute our unsecured and unsubordinated general obligations and will rank pari passu with our other unsecured and unsubordinated obligations. The subordinated debt securities will constitute our unsecured and subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading " Certain Terms of the Subordinated Debt Securities Subordination."

The debt securities will be our unsecured obligations. Any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities being offered, including the following terms:

the title and type of the debt securities;

whether the debt securities will be senior or subordinated debt securities, and, with respect to debt securities issued under the subordinated indenture the terms on which they are subordinated;

the aggregate principal amount of the debt securities;

the price or prices at which we will sell the debt securities;

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the maturity date or dates of the debt securities and the right, if any, to extend such date or dates;

the rate or rates, if any, per year, at which the debt securities will bear interest, or the method of determining such rate or rates;

the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates and the related record dates;

the right, if any, to extend the interest payment periods and the duration of that extension;

the manner of paying principal and interest and the place or places where principal and interest will be payable;

provisions for a sinking fund, purchase fund or other analogous fund, if any;

any redemption dates, prices, obligations and restrictions on the debt securities;

the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable;

any conversion or exchange features of the debt securities;

whether and upon what terms the debt securities may be defeased;

any events of default or covenants in addition to or in lieu of those set forth in the indenture;

whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions;

whether the series of debt securities will be guaranteed as to payment or performance;

any special tax implications of the debt securities; and

any other material terms of the debt securities.

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

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A holder may present debt securities for exchange and a holder may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide a holder with those services without charge, although a holder may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par which are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

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We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. A holder may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

Certain Terms of the Senior Debt Securities

Covenants. Unless we indicate otherwise in a prospectus supplement, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries' property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets. Unless we indicate otherwise in a prospectus supplement, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust (subject to certain exceptions provided for in the senior indenture);

the successor entity assumes our obligations on the senior debt securities and under the senior indenture;

immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and

certain other conditions are met.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. The following are events of default under the senior indenture for any series of senior debt securities:

failure to pay principal or premium on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period);

failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 90 days (or such other period as may be specified for such series);

default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach which is specifically dealt with elsewhere in the senior indenture, and that default or breach continues

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for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series;

certain events of bankruptcy or insolvency, whether or not voluntary; and

any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

The default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of, premium, if any, on and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs and is continuing, the entire principal amount of, premium, if any, on and accrued interest on each series of senior debt securities then outstanding shall become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, prior to a declaration of acceleration and subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of, premium, if any, on or interest on such senior debt securities. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto.

The holders of a majority in aggregate principal amount of a series of senior debt securities 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 such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

the holder gives the trustee written notice of a continuing event of default;

the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default;

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the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense;

the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and

during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security to receive payment of the principal of, premium, if any, on and interest on such senior debt security, or to bring suit for the enforcement of any such payment, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge. We can satisfy and discharge our obligations to holders of any series of debt securities if:

we pay or cause to be paid, as and when due and payable, the principal of, premium, if any, and any interest on all senior debt securities of such series outstanding under the senior indenture; or

all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year) and we deposit in trust a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal, any premium and any other payments on the debt securities of that series on their various due dates.

Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back a holder's debt securities and gave such holder his or her share of the cash and debt securities or bonds deposited in trust. In that event, such holder could recognize gain or loss on the debt securities such holder gives back to us. Holders of the debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance. Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and discharge and covenant defeasance will apply to any series of senior debt securities issued under the senior indenture.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the senior debt securities of any series (called "legal defeasance") if certain conditions are met, including the following:

We deposit in trust for a holder's benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal, any premium and any other payments on the senior debt securities of that series on their various due dates.

There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing any holder to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities

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ourselves when due. Under current U.S. federal income tax law, the deposit and our legal release from the senior debt securities would be treated as though we took back any holder's senior debt securities and gave such holder his or her share of the cash and senior debt securities or bonds deposited in trust. In that event, such holder could recognize gain or loss on the senior debt securities such holder gives back to us.

We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we ever did accomplish legal defeasance, as described above, holders would have to rely solely on the trust deposit for repayment of the senior debt securities. Such holders could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change of current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the senior debt securities (called "covenant defeasance"). In that event, holders would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the senior debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

We must deposit in trust for any holder's benefit and the benefit of all other direct holders of the senior debt securities of the same series a combination of cash and U.S. government or U.S. government agency obligations that will generate enough cash to make interest, principal, any premium and any other payments on the senior debt securities of that series on their various due dates.

We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing any holder to be taxed on the senior debt securities any differently than if we did not make the deposit and instead repaid the senior debt securities ourselves when due.

If we accomplish covenant defeasance as described above, holders can still look to us for repayment of the senior debt securities if there were a shortfall in the trust deposit. In fact, if one of the Events of Default occurred (such as our bankruptcy) and the senior debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, holders may not be able to obtain payment of the shortfall.

Modification and Waiver. We and the trustee may amend or supplement the senior indenture or the senior debt securities without the consent of any holder:

to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;

to evidence the succession of another corporation, and the assumption by such successor corporation of our covenants, agreements and obligations under the senior indenture;

to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default;

to cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement;

to provide for or add guarantors with respect to the senior debt securities of any series;

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to establish the form or forms or terms of the senior debt securities as permitted by the senior indenture;

to evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;

to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms, purposes of issue, authentication and delivery of any series of senior debt securities;

to make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding; or

to make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

extends the final maturity of any senior debt securities of such series;

reduces the principal amount of, or premium, if any, on any senior debt securities of such series;

reduces the rate or extends the time of payment of interest on any senior debt securities of such series;

reduces the amount payable upon the redemption of any senior debt securities of such series;

changes the currency of payment of principal of, or premium, if any, or interest on, any senior debt securities of such series;

reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy;

waives a default in the payment of principal of, or premium, if any, or interest on the senior debt securities;

changes the provisions relating to the waiver of past defaults or changes or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor;

modifies any of the provisions for these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification; or

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reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or to modify or amend or to waive certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders

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affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Incorporators, Stockholders, Officers, Directors. The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our incorporators, stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee. The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act of 1939 incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds. All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such principal, premium or interest became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

Governing Law. The senior indenture and the senior debt securities, and any claim, controversy or dispute arising under or related to the senior indenture or the senior debt securities, will be governed by, and construed in accordance with, the laws of the State of New York.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of, or premium, if any, on or interest on the subordinated debt securities (except

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for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of, or premium, if any, on and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term "senior indebtedness" of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

all of the indebtedness of that person for money borrowed;

all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money;

all of the lease obligations which are capitalized on the books of that person in accordance with generally accepted accounting principles;

all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise; and

all renewals, extensions or refundings of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above;

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated debt indenture.

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DESCRIPTION OF WARRANTS

We may issue warrants to purchase debt securities, preferred stock or common stock. We may offer warrants separately or together with one or more additional warrants, debt securities, preferred stock or common stock, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. If we issue warrants as part of a unit, the accompanying prospectus supplement will specify whether those warrants may be separated from the other securities in the unit prior to the expiration date of the warrants. The applicable prospectus supplement will also describe the following terms of any warrants:

the specific designation and aggregate number of, and the offering price at which we will issue, the warrants;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the holder may not continuously exercise the warrants throughout that period, the specific date or dates on which such holder may exercise the warrants;

whether the warrants are to be sold separately or with other securities as parts of units;

whether the warrants will be issued in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

any applicable material U.S. federal income tax consequences;

the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

the designation and terms of any equity securities purchasable upon exercise of the warrants;

the designation, aggregate principal amount, currency and terms of any debt securities that may be purchased upon exercise of the warrants;

if applicable, the designation and terms of the debt securities, preferred stock or common stock with which the warrants are issued and, the number of warrants issued with each security;

if applicable, the date from and after which any warrants issued as part of a unit and the related debt securities, preferred stock or common stock will be separately transferable;

the number of shares of preferred stock or the number of shares of common stock purchasable upon exercise of a warrant and the price at which those shares may be purchased;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

information with respect to book-entry procedures, if any;

the antidilution provisions of, and other provisions for changes to or adjustment in the exercise price of, the warrants, if any;

any redemption or call provisions; and

any additional terms of the warrants, including terms, procedures and limitations relating to the exchange or exercise of the warrants.

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FORMS OF SECURITIES

Each debt security and warrant will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Unless the applicable prospectus supplement provides otherwise, certificated securities in definitive form and global securities will be issued in registered form. Definitive securities name a holder or a holder's nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, a holder or a holder's nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depository or its nominee as the owner of the debt securities or warrants represented by these global securities. The depository maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Registered Global Securities

We may issue the registered debt securities and warrants in the form of one or more fully registered global securities that will be deposited with a depository or its nominee identified in the applicable prospectus supplement and registered in the name of that depository or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depository for the registered global security, the nominees of the depository or any successors of the depository or those nominees.

If not described below, any specific terms of the depository arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depository arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depository or persons that may hold interests through participants. Upon the issuance of a registered global security, the depository will credit, on its book entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depository, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair a holder's ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depository, or its nominee, is the registered owner of a registered global security, that depository or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the applicable indenture, purchase contract, warrant agreement or purchase unit agreement. Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the applicable indenture or warrant agreement. Accordingly, each

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person owning a beneficial interest in a registered global security must rely on the procedures of the depository for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture or warrant agreement. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the applicable indenture or warrant agreement, the depository for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities, and any payments to holders with respect to warrants represented by a registered global security registered in the name of a depository or its nominee will be made to the depository or its nominee, as the case may be, as the registered owner of the registered global security. None of us, the trustees, the warrant agents, the unit agents or any other agent of ours, agent of the trustees or agent of the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depository for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium, interest or other distribution of underlying securities or other property to holders on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depository. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers or registered in "street name," and will be the responsibility of those participants.

If the depository for any of the securities represented by a registered global security is at any time unwilling or unable to continue as depository or ceases to be a clearing agency registered under the Exchange Act, and a successor depository registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depository. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depository gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depository's instructions will be based upon directions received by the depository from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depository.

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SELLING SECURITYHOLDERS

Information about selling securityholders, where applicable, will be set forth in a prospectus supplement, in a post-effective amendment, or in filings we make with the SEC under the Exchange Act that are incorporated by reference.

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PLAN OF DISTRIBUTION

We or a selling securityholder may sell securities:

through underwriters;

through dealers;

through agents;

directly to purchasers;

through a combination of any of these methods of sale; or

through any other methods described in a prospectus supplement.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing securityholders. We or any selling securityholder may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act of 1933, as amended, or the Securities Act, and describe any commissions that we or the selling securityholders must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

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 of a particular series will describe the terms of the offering of the securities, including the following:

the name of the agent or any underwriters;

the public offering or purchase price;

any discounts and commissions to be allowed or paid to the agent or underwriters;

all other items constituting underwriting compensation;

any discounts and commissions to be allowed or paid to dealers; and

any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we and any selling securityholder will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which the prospectus is delivered, we and any selling securityholder will sell such securities to the dealer, as principal. The dealer may

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then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter 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.

We may pay expenses incurred with respect to the registration of the common shares owned by any selling securityholders.

If so indicated in the applicable prospectus supplement, we or any selling securityholder will authorize underwriters or other persons acting as our or such selling securityholder's agents to solicit offers by certain institutions to purchase securities from us or such selling securityholder pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and

if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

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Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for a holder's securities may be more than three scheduled business days after the trade date for such securities. Accordingly, in such a case, if a holder wishes to trade securities on any date prior to the third business day before the original issue date for such securities, such holder will be required, by virtue of the fact that such securities initially are expected to settle in more than three scheduled business days after the trade date for such securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless the applicable prospectus supplement indicates otherwise, the validity of any securities offered from time to time by this prospectus and any related prospectus supplement will be passed upon for us by Latham & Watkins LLP, Boston, Massachusetts.

EXPERTS

The financial statements of A123 Systems, Inc. as of December 31, 2010 and 2009, and for each of the three years in the period ended December 31, 2010, incorporated by reference in this prospectus, and the effectiveness of A123 Systems, Inc.'s internal control over financial reporting as of December 31, 2010 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports (which reports express an unqualified opinion on the financial statements, and an adverse opinion on the effectiveness of internal control over financial reporting due to a material weakness), which are incorporated by reference herein. Such financial statements have been incorporated in reliance upon the reports of such firm given their authority as experts in accounting and auditing.

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You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and any related free writing prospectus. We have not authorized anyone to provide information different from that contained in this prospectus supplement, the accompanying prospectus and any related free writing prospectus. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement is accurate only as of the date of this prospectus supplement, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our convertible notes.

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A123 Systems, Inc.

\$125,000,000

% Convertible Subordinated Notes due 2016

Deutsche Bank Securities

Goldman, Sachs & Co.

Morgan Stanley

Barclays Capital

Lazard Capital Markets

Pacific Crest Securities

Prospectus Supplement

March , 2011
