

MoSys, Inc.
 Form 424B5
 December 07, 2010

Filed Pursuant to Rule 424(b)(5)

Registration No.: 333-170327

Prospectus Supplement
(To Prospectus dated November 3, 2010)

MoSys, Inc.

**4,955,000 Shares
 Common Stock**

We are offering directly to investors 4,955,000 shares of our common stock.

Our common stock is traded on the Global Market of the NASDAQ Stock Market under the symbol MOSY. On December 6, 2010, the last reported sale price of our common stock was \$4.38 per share.

Investing in our common stock involves risk. See Risk Factors beginning on page S-4 of this prospectus supplement.

Neither the 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 Share	Total	
Offering price to public	\$ 4.00	\$	17,800,000.00
Proceeds, before expenses, to MoSys, Inc.	\$ 4.00	\$	17,800,000.00

	Per Share	Total	
Offering price to officers and directors*	\$ 4.38	\$	2,211,900.00
Proceeds, before expenses, to MoSys, Inc.	\$ 4.38	\$	2,211,900.00

* Certain insiders of ours are purchasing shares at the market price.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information. To the extent there is a conflict between the information contained in this prospectus supplement, on one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in the prospectus. We have not authorized anyone to provide you with information that is different. We are offering our common stock only in jurisdictions where such offers are permitted. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement, or of any sale of our common stock. It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in the prospectus in making your investment decision. You should also read and consider the information in the documents to which we have referred in *Where You Can Find More Information*, below.

You should not assume that the information contained in this prospectus supplement or the accompanying prospectus is accurate as of any date other than their respective dates, or that the information contained in any document incorporated by reference in this prospectus is accurate as of any date other than the date on which that document was filed with the Securities and Exchange Commission, or SEC.

We and the underwriters are not making an offer to sell the common stock in jurisdictions where the offer or sale is not permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offer and sale of our common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute an offer of, or an invitation to purchase, any shares of common stock in any jurisdiction in which such offer or invitation would be unlawful.

You should rely only on the information contained in the prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. We are offering our common stock only in jurisdictions where such offers are permitted. The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement, or of any sale of our common stock.

In this prospectus supplement, MoSys, we, us, and our refer to MoSys, Inc. and our subsidiaries on a consolidated basis.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information related to our business. Since it is a summary, this section may not contain all the information that you should consider before investing in our common stock. You should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference in each one, including the Risk Factors section.

Our Business

We design, develop, market and license embedded memory intellectual property, or IP, used by the semiconductor industry and electronic product manufacturers. We have developed a patented semiconductor memory technology, called 1T-SRAM, which offers a combination of high density, low power consumption and high-speed at performance and cost levels that other available memory technologies do not match. We license this technology to companies that incorporate, or embed, memory on complex integrated circuits, or ICs, such as system-on-chips, or SoCs.

Our innovative 1T-SRAM technologies provide major advantages over traditional SRAM in density, power consumption and cost, making it more economical for designers to incorporate large amounts of embedded memory in their designs. In addition, our 1T-SRAM technologies offer all the benefits of traditional SRAM, such as high-speed, simple interface and ease of manufacturability. Our 1T-SRAM technologies can achieve these advantages while utilizing standard logic manufacturing processes and providing the simple, standard SRAM interface that designers are accustomed to.

We also design, develop, market and license high-speed parallel and serial interface, or I/O, IP used by the semiconductor industry and electronic product manufacturers. I/O IP includes physical layer circuitry that allows ICs to communicate with each other or to discrete memory devices in networking, storage, computer and consumer devices. We support serial I/O technologies such as 10G KR, XAUI, PCI Express and SATA, as well as parallel interfaces like DDR3.

In February 2010, we announced the commencement of a new product initiative to develop a family of IC products under the Bandwidth Engine product name. The Bandwidth Engine will combine our 1T-SRAM high-density embedded memory with our high-speed 10 Gigabits per second serial communication I/O technology and will initially be marketed to networking systems companies. The Bandwidth Engine is being designed to increase system performance by using a serial I/O to increase the accesses per second between the processor and memory component in networking systems.

We generate revenue from the licensing of our memory and I/O technology, and our customers pay us fees for licensing, non-recurring engineering services, royalties, and maintenance and support. We offer our memory and I/O technology on a worldwide basis to semiconductor companies, electronic product manufacturers, foundries, intellectual property companies and design companies through product development, technology licensing and joint marketing relationships.

We license our technology to semiconductor companies who incorporate our technology into ICs that they sell to their customers. We also sell to system companies that design application-specific integrated circuits. In addition, we engage in joint marketing activities with foundries, other IP companies and design companies to promote our technology to a wide base of customers.

Edgar Filing: MoSys, Inc. - Form 424B5

We were founded in 1991. Our principal executive offices are located at 3301 Olcott Street, Santa Clara, CA 95054. Our telephone number at that address is (408) 418-7500.

S-1

THE OFFERING

Common stock offered by MoSys, Inc.	4,955,000
Common stock to be outstanding after this offer	37,138,892
Use of proceeds	We intend to use all the net proceeds we receive from our sale of shares in this offering for general corporate purposes. See Use of Proceeds below.
NASDAQ National Market symbol	MOSY
Risk Factors	See Risk Factors beginning on page S-4 for a discussion of the factors you should consider before deciding to invest in shares of our common stock.

The number of shares of our common stock to be outstanding after this offering is based upon 32,183,892 shares outstanding as of November 30, 2010. This number does not include:

- 5,320,892 shares of common stock issuable upon exercise of outstanding exercisable stock options with a weighted average exercise price of approximately \$4.74 per share;
- 5,228,547 shares of common stock issuable upon exercise of outstanding stock options that are not exercisable;
- 30,683 shares of common stock issuable upon vesting of outstanding restricted stock unit awards;
- 3,650,000 shares of common stock available for future issuance under our stock option plans; and
- 2,000,000 shares of common stock available for sale under our employee stock purchase plan.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus supplement or the accompanying prospectus constitute forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. These factors include, among others, those incorporated by reference under "Risk Factors" below.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "predicts," "potential," or "continue" or similar terms.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors incorporated by reference under the heading "Risk Factors" below and a variety of other factors, including, without limitation, statements about our future business operations and results, the market for our technology, our strategy and competition.

Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these statements. We undertake no obligation to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events discussed or incorporated by reference in this prospectus supplement or the accompanying prospectus may not occur.

RISK FACTORS

An investment in our common stock is risky. Prior to making a decision about investing in our common stock, you should carefully consider the risks discussed below, together with all of the other information contained in this prospectus supplement and the accompanying prospectus, or otherwise incorporated by reference in this prospectus supplement and the accompanying prospectus. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described below or in our filings with the Securities and Exchange Commission or any such additional risks and uncertainties actually occur, our business, results of operations, cash flows and financial condition could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you might lose all or part of your investment.

RISKS RELATING TO OUR BUSINESS

Our success depends upon the semiconductor market's acceptance of our embedded memory and high-speed interface technologies.

The future prospects of our business depend on the acceptance by our target markets of our technologies, including embedded memory applications, I/O technologies and any future technology we might develop, such as our Bandwidth Engine ICs that are currently under development. We have not achieved substantial or rapid growth in our technology licensing revenue since we began selling and marketing the technologies and cannot be assured of realizing such growth in the future. Our memory technology is intended to allow our licensees to develop embedded memory integrated circuits to replace other embedded memory technology with different cost and performance parameters. Whereas our high-speed I/O technologies allow our licensees to deliver high performance input-output processing to connect their SoC chips to other system chips, replacing their existing interface technology involves different cost and performance metrics. Our memory technologies utilize fundamentally different internal circuitry that is not widely known in the semiconductor industry. Therefore, one of our principal challenges, which we might fail to meet, is to convince a substantial percentage of SoC designers to adopt our technology instead of other solutions, which may have proven effective in their products. We have invested significant resources to expand our IP technology offerings for the SOC market, but may not introduce these new technology offerings successfully or obtain significant revenue from them.

An important part of our strategy to gain market acceptance is to penetrate new markets by targeting market leaders as licensees of our solutions. This strategy is designed to encourage other participants in those markets to follow these leaders in adopting our solutions. If a high-profile industry participant adopts our technology or ICs for one or more of its products but fails to achieve success with those products, or is unable to successfully implement our technology or ICs, other industry participants' perception of our solutions could be harmed. Any such event could reduce the number of future sales of our solutions.

Our lengthy licensing cycle and our licensees' lengthy product development cycles make the operating results of our licensing business difficult to predict.

We anticipate difficulty in accurately predicting the timing and amounts of revenue generated from licensing our technologies. The establishment of a business relationship with a potential licensee is a lengthy process, generally taking from three to nine months, and sometimes longer during slower periods in our industry. Following the establishment of the relationship, the negotiation of licensing terms can be time-consuming, and a potential licensee may require an extended evaluation and testing period.

Once a license agreement has been executed, the timing and amount of licensing and royalty revenue, if applicable, from our licensing business remain difficult to predict. The completion of the licensee's development projects and the commencement of production are subject to the licensee's efforts, development risks and other factors outside our control. Our royalty revenue will depend on such factors as the success of the licensee's project, the licensee's production and shipment volumes, the timing of product shipments, selling price of the products and when the licensee reports to us the manufacture or sale of products that include our technologies.

S-4

All of these factors will prevent us from making predictions of revenue with any certainty and could cause us to experience substantial period-to-period fluctuations in our operating results.

None of our licensees are under any obligation to incorporate our technology in any present or future product or to pursue the manufacture or sale of any product incorporating our technology. A licensee's decision to complete a project or manufacture a product is subject to changing economic, marketing or strategic factors. The long development cycle of a licensee's products increases the risk that these factors will cause the licensee to change its plans. In the past, some of our licensees have discontinued development of products incorporating our technology. Although in most cases their decisions were based on factors unrelated to our technology, it is unlikely that we will receive royalties in connection with those products. We expect that occasionally our licensees will discontinue a product line or cancel a product introduction, which could adversely affect our future operating results and business.

If the market for SoC integrated circuits does not expand, our business will suffer.

Our ability to achieve sustained revenue growth and profitability in the future will depend on the continued development of the market for SoCs, particularly those requiring embedded memory sizes of one megabit or more, and high-speed interfaces of speeds over one gigabit per second. In addition, our ability to achieve design wins with customers is dependent upon the growth of embedded memories and high-speed interfaces required in SoCs. SoCs are characterized by rapid technological change and competition from an increasing number of alternate design strategies such as combining multiple integrated circuits to create a System-in-a-Package.

We cannot be certain that the market for SoCs will continue to develop or grow at a rate sufficient to support our business, or that if such growth does occur, that it will lead to significant growth in our business. SoC providers depend on the demand for products requiring SoCs, such as cellular phones, game consoles, smart phones, digital cameras, digital media players, network switches, storage systems and computer systems. The demand for such products is uncertain and difficult to predict and depends on factors beyond our control. If the market fails to grow or develops more slowly than expected, our business will suffer.

The semiconductor industry is cyclical in nature and subject to periodic downturns, which can negatively affect our revenue.

The semiconductor industry is cyclical and has experienced pronounced downturns for sustained periods of up to several years. We believe that we are currently in such a downturn. To respond to any downturn, many semiconductor manufacturers and their customers will slow their research and development activities, cancel or delay new product developments, reduce their workforces and inventories and take a cautious approach to acquiring new equipment and technologies. As a result, our business has been in the past and could be adversely affected in the future by an industry downturn, which could negatively impact our future revenue and profitability. Also, the cyclical nature of the semiconductor industry may cause our operating results to fluctuate significantly from year-to-year, which may tend to increase the volatility of the price of our common stock.

We have a history of losses and are uncertain as to our future profitability.

We recorded an operating loss of \$17.5 million for the nine months ended September 30, 2010 and ended the period with an accumulated deficit of \$70.9 million. In addition, we recorded operating losses of \$20.0 million, \$20.7 million and \$13.6 million for the years ended December 31,

Edgar Filing: MoSys, Inc. - Form 424B5

2009, 2008 and 2007, respectively. We may continue to incur operating losses for the foreseeable future as we invest in the development of our Bandwidth Engine IC as well as continue to invest in our IP technologies. Due to our strong commitment of resources to research and development and expansion of our offerings to customers, we will need to increase revenues substantially beyond levels that we have attained in the past in order to generate sustainable operating profit. Given our history of fluctuating revenues and operating losses, difficulties in securing new license agreements for our 1T-SRAM and uncertainties regarding the viability of our 1T-Flash technology, we cannot be certain that we will be able to achieve profitability on either a quarterly or annual basis in the future.

S-5

We may not achieve the anticipated benefits of becoming a fabless semiconductor company by developing and bringing to market the Bandwidth Engine integrated circuit product line.

In February 2010, we announced the expansion of our business model to become a fabless semiconductor company through the development of a product line of ICs called the Bandwidth Engine. Our goal is to increase our total available market by creating high-performance integrated circuits for networking systems, using our proprietary technology and design expertise. This development effort has required that we add significant headcount and design resources, such as expensive software tools, which has increased our operating loss and cash used in operations. We may not be successful in our development efforts to bring the Bandwidth Engine to market or be successful in selling the Bandwidth Engine due to various risks and uncertainties, including, but not limited to:

- customer acceptance of the Bandwidth Engine ICs;
- difficulties and delays in the development, production, testing and marketing of the Bandwidth Engine ICs;
- the anticipated costs and technological risks of developing and bringing ICs to market;
- the willingness of our manufacturing partners to assist successfully with the fabrication of Bandwidth Engine ICs;
- the availability of quantities of ICs supplied by our manufacturing partners at a competitive cost;
- our ability to generate the desired gross margin percentages and return on our product development investment;
- competition for our Bandwidth Engine ICs from established IC suppliers;
- the adequacy of our intellectual property protection for our proprietary IC designs and technologies;
- the vigor and growth of markets served by licensees, customers and prospects; and
- our lack of recent experience as a fabless semiconductor company making and selling proprietary ICs.

If we experience significant delays in bringing the Bandwidth Engine to market or if the initial Bandwidth Engine product is not successful, we may need to raise additional capital to support the product development efforts and fund our working capital needs.

We might be unable to deliver our customized technology within an agreed technical specification in the time frame demanded by our licensees, which could damage our reputation, harm our ability to attract future licensees and adversely impact operating results.

Many of our licenses require us to deliver a customized memory block or customized high-speed interface within an agreed technical specification by a certain delivery timetable. This requires us to furnish a unique design for each customer, which can make the development schedule difficult to predict and involves extensive interaction with our customers' engineers. From time to time, we have experienced delays in delivering our customized deliverables that meet the agreed technical specifications, which can result from slower engineering progress than we originally anticipated, or there might be factors outside our control, such as the customer's delay in completing verification of the customer's integrated circuit or manufacturing process issues at the foundries. Such delays may affect the timing of recognition of revenues and collection of amounts due from a particular project and can adversely affect our operating results and financial condition.

In addition, any failure to meet our customers' timetables, as well as the agreed upon technical specifications of our customized deliverables could lead to the failure to collect, or a delay in collecting royalties and licensing fee payments from our licensees, damage our reputation in the industry, harm our ability to attract new licensees and negatively impact our operating results. Furthermore, a customer may assert that we are responsible for delays and cost overruns and demand reimbursement for some of its costs, which we may elect to reimburse in whole or in part in order to address the customer's concerns.

Our business model relies on royalties as a key component in the generation of revenues from the licensing of our memory technologies, and if we fail to realize expected royalties our operating results will suffer.

We believe that our long-term success is substantially dependent on the receipt of future royalties. Royalty payments owed to us are calculated based on factors such as our licensees' selling prices, wafer production and other variables as provided in each license agreement. The amount of royalties we will receive depends on the licensees' business success, production volumes and other factors beyond our control. This exposes our business model to risks that we cannot minimize directly and may result in significant fluctuations in our royalty revenue and operating results from quarter-to-quarter. We cannot be certain that our business strategy will be successful in expanding the number of licensees, nor can we be certain that we will receive significant royalty revenue in the future. If we are unable to generate significant royalty revenue in the future, our future operating results, financial condition and business would suffer.

Our revenue has been highly concentrated among a small number of licensees and customers, and our results of operations could be harmed if we lose a key revenue source and fail to replace it.

Our overall revenue has been highly concentrated, with a few customers accounting for a significant percentage of our total revenue. For the nine months ended September 30, 2010, two customers represented 21% and 17% of total revenue. For the nine months ended September 30, 2009, two customers represented 48% and 10% of total revenue, respectively. For the year ended December 31, 2009, our three largest customers represented 44%, 10%, and 10% of total revenue, respectively. For the year ended December 31, 2008, our two largest customers represented 55% and 13% of total revenue, respectively. For the year ended December 31, 2007, one customer represented 70% of total revenue. We expect that a relatively small number of licensees will continue to account for a substantial portion of our revenue for the foreseeable future. We expect that a relatively small number of licensees will continue to account for a substantial portion of our revenue for the foreseeable future.

Our royalty revenue also has been highly concentrated among a few licensees, and we expect this trend to continue for the foreseeable future. In particular, a substantial portion of our licensing and royalty revenue in the nine months ended September 30, 2010 and 2009 has come from the licenses for integrated circuits used by one electronics manufacturing company. Royalties earned from the production of this company's gaming devices incorporating our 1T-SRAM technology represented 20% of total revenue for the nine months ended September 30, 2010 and 42% for the nine months ended September 30, 2009. Royalties earned from this customer represented 39%, 47%, and 41% of total revenue in 2009, 2008 and 2007, respectively. This manufacturer faces intense competitive pressure in the video game market, which is characterized by extreme volatility, costly new product introductions and rapidly shifting consumer preferences, and we cannot be certain whether their sales of products incorporating our technology will increase or decrease beyond prior or current levels.

As a result of this revenue concentration, our results of operations could be impaired by the decision of a single key licensee or customer to cease using our technology or products or by a decline in the number of products that incorporate our technology that are sold by a single licensee or customer or by a small group of licensees or customers.

Our revenue concentration may also pose credit risks, which could negatively affect our cash flow and financial condition.

We might also face credit risks associated with the concentration of our revenue among a small number of licensees and customers. As of September 30, 2010, five customers represented 88% of total trade receivables. Our failure to collect receivables from any customer that represents a large percentage of receivables on a timely basis, or at all, could adversely affect our cash flow or results of operations and might cause our stock price to fall.

Anything that negatively affects the businesses of our licensees could negatively impact our revenue.

The timing and level of our licensing and royalty revenues are dependent on our licensees and the business environment in which they operate. Licensing and royalty revenue are the largest source of our revenues; anything that negatively affects a significant licensee or group of licensees could negatively affect our results of operations and financial condition. Many factors beyond our control influence the success of our licensees, including, for example, the highly competitive environment in which they operate, the strength of the markets for their products, their engineering capabilities and their financial and other resources.

Likewise, we have no control over the product development, pricing and marketing strategies of our licensees, which directly affect the licensing of our technology and corresponding future royalties payable to us from our licensees. Our royalty revenues are subject to our licensees' ability to market, produce and ship products incorporating our technology. A decline in sales of our licensees' royalty-generating products for any reason would reduce our royalty revenue. In addition, seasonal and other fluctuations in demand for our licensees' products could cause our operating results to fluctuate, which could cause our stock price to fall.

We rely on semiconductor foundries to assist us in attracting potential licensees, and a loss or failure of these relationships could inhibit our growth and reduce our revenue.

Part of our marketing strategy relies upon our relationships and agreements with semiconductor foundries, such as TSMC, UMC, Silterra, Ltd., and SMIC, among others. These foundries have existing relationships, and continually seek new relationships, with companies in the markets we target, and they have agreed to utilize these relationships to introduce our technology to potential licensees. If we fail to maintain and expand our current relationships with these foundries, we might fail to achieve anticipated growth. Our relationship with these foundries is not exclusive, and they are free to promote or develop other IP technologies, including their own. The foundries' promotions of alternative technologies reduce the size of our potential market and may adversely affect our revenues and operating results. Foundries that license our IP for designs they provide to their customers may compete with us for such customers, and due to such competition, may be less inclined to help us with new technology development.

Additionally, we rely on third-party foundries to manufacture our silicon test chips, to provide references to their customers and to assist us in the focus of our research and development activities. If we are unable to maintain our existing relationships with these foundries or enter into new relationships with other foundries, we will be unable to verify our technologies for their manufacturing processes and our ability to develop new technologies will be hampered. We would then be unable to license our intellectual property to fabless semiconductor companies that use these foundries to manufacture their silicon chips, which is a significant source of our revenues.

Our embedded memory technology and I/O technologies are unique and the occurrence of manufacturing difficulties or low production yields, if not corrected, could hinder market acceptance of our technology and reduce future revenue.

Complex technologies like ours could be adversely affected by difficulties in adapting our embedded memory and high-speed I/O technologies to our licensees' product designs or to the manufacturing process technology of a particular foundry or semiconductor manufacturer. Some of our customers have experienced lower than expected yields when initially integrating our designs into their SoCs. We work closely with our customers to resolve any design or process issues in order to achieve the optimum production yield.

Edgar Filing: MoSys, Inc. - Form 424B5

Any decrease in manufacturing yields of integrated circuits utilizing our technology could impede the acceptance of our technology in the industry. The discovery of defects or problems regarding the reliability, quality or compatibility of our technology could require significant expenditures and resources to fix, significantly delay or hinder market acceptance of our technology, reduce anticipated revenues and damage our reputation.

Our failure to compete effectively in the market for embedded memory and I/O technology could significantly limit or reduce our revenue.

S-8

Competition in the market for embedded memory and I/O solutions is intense. Our licensees and prospective licensees can meet their need for embedded memory solutions by using traditional memory solutions with different cost and performance parameters, which they may internally develop or acquire from third-party vendors. In recent years, the demand for applications for which our 1T-SRAM technologies provide distinct advantages has not experienced significant growth. If alternative technologies are developed that provide comparable system performance at lower cost than our 1T-SRAM technologies for certain applications and/or do not require the payment of comparable royalties, or if the industry generally demonstrates a preference for applications for which our 1T-SRAM technologies do not offer significant advantages, our ability to realize revenue from our 1T-SRAM technologies could be impaired.

The market for serial I/O technology is driven by the demand for solutions in the most advanced technology nodes. Our competitors may be more experienced in the I/O technology market, and therefore able to provide a wider range of products or bundle different product offerings to attract customers and offer lower pricing. Also, if our competitors are able to provide designs to customers that have been verified in silicon before we are able to, our revenues may be adversely affected.

We also may be challenged by competitive developers of alternative technologies who are more established, benefit from greater market recognition and have substantially greater financial, development, manufacturing and marketing resources than we have. These advantages might permit these developers to respond more quickly to new or emerging technologies and changes in licensee requirements. We cannot assure you that future competition will not have a material adverse effect on the adoption of our technology and our market penetration.

We have invested significant resources to expand our IP technology offerings for the SOC market, but we might not successfully introduce these new technology offerings or obtain significant revenue from them.

We have and will continue to invest significant financial and personnel resources in new IP technology offerings for the SoC market, including 1T-Flash and I/O technologies. To date, substantially all of our revenue has been generated from our 1T-SRAM technologies. We intend for our new IP technologies under development to increase our revenues and expand our business with existing and new customers. These technology offerings require further development and have not been silicon verified or tested in production or commercial use, however, and, as with our existing 1T-SRAM technologies, these new IP technologies are inherently complex. Our success with these new technologies will depend on many presently uncertain factors, including:

- the total investment required before we can determine their commercial viability;
- our ability to demonstrate silicon verified IP in customer product applications;
- our ability to generate revenues in excess of development costs incurred;
- the extent to which we may create new proprietary IP to establish entry barriers for our competitors;

Edgar Filing: MoSys, Inc. - Form 424B5

- the acceptability to our customers of these technologies and the ease with which they can integrate them with their existing or future SOC designs;
- the overall demand for these new technologies and the willingness of customers to pay significant non-recurring engineering fees and royalties to license them from us;
- the length of the sales cycle, which has taken up to 24 months in the case of our existing 1T-SRAM technology; and
- the potential introduction by our competitors of alternative products with better or comparable features or at a lower price.

S-9

Any of these factors could adversely affect our ability to successfully introduce these new IP technologies and generate significant revenue from them. If we fail to achieve our objectives for these technologies it may affect our cash flows and results of operations adversely and result in a material decline in the trading price of our common stock. In addition, even if we successfully license these new technologies to customers, if they do not work as anticipated, our reputation and ability to do business in the marketplace could be affected adversely.

Our failure to continue to enhance our technology or develop new technology on a timely basis could diminish our ability to attract and retain licensees and product customers.

The existing and potential markets for our products and technology are characterized by ever increasing performance requirements, evolving industry standards, rapid technological change and product obsolescence. These characteristics lead to frequent new product and technology introductions and enhancements, shorter product life cycles and changes in consumer demands. In order to attain and maintain a significant position in the market, we will need to continue to enhance our technology in anticipation of these market trends.

In addition, the semiconductor industry might adopt or develop a completely different approach to utilizing memory and interface technologies for many applications, which could render our existing technology unmarketable or obsolete. We might not be able to successfully develop new technology, or adapt our existing technology, to comply with these innovative standards.

Our future performance depends on a number of factors, including our ability to

- identify target markets and relevant emerging technological trends, including new standards and protocols;
- develop and maintain competitive technology by improving performance and adding innovative features that differentiate our technology from alternative technologies;
- enable the incorporation of enhanced technology in our licensees' and customers' products on a timely basis and at competitive prices;
- implement our technology at future manufacturing process generations; and
- respond effectively to new technological developments or new product introductions by others.

We continually introduce enhancements to our technologies to meet market requirements. However, we cannot be assured that the design and introduction schedules of any additions and enhancements to our existing and future technology will be met, that this technology will achieve market acceptance or that we will be able to license this technology on terms that are favorable to us. Our failure to develop future technology

that achieves market acceptance could harm our competitive position and impede our future growth.

Any claim that our products or technology infringe third-party intellectual property rights could increase our costs of operation and distract management and could result in expensive settlement costs or the discontinuance of our technology licensing or product offerings. In addition, we may incur substantial litigation expense, which would adversely affect our profitability.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights or positions, which has resulted in often protracted and expensive litigation. For example, on March 31, 2004, we were sued by UniRAM Technology, Inc. in United States District Court for the Northern District of California based on claims of patent infringement and misappropriation of trade secrets that were allegedly disclosed by UniRAM to TSMC, which allegedly improperly provided them to us. In the fourth quarter of 2006, we settled this litigation and paid \$2.4 million to UniRAM. Our licensees, or we, might, from time to time, receive notice of claims that we have infringed patents or other intellectual property rights of others. Litigation against us, particularly patent litigation such as the UniRAM suit, can result in significant expense and divert the efforts of our technical and management personnel, whether or not the litigation has merit or results in a determination adverse to us.

Royalty amounts owed to us might be difficult to verify, and we might find it difficult, expensive and time-consuming to enforce our license agreements.

The standard terms of our license agreements require our licensees to document the manufacture and sale of products that incorporate our technology and generally report this data to us after the end of each quarter. We have the right to audit these royalty reports periodically. These audits can be expensive, time-consuming and potentially detrimental to the business relationship. A failure to fully enforce the royalty provisions of our license agreements could cause our revenue to decrease and impede our ability to achieve and maintain profitability.

We might not be able to protect and enforce our intellectual property rights, which could impair our ability to compete and reduce the value of our technology.

Our technology is complex and is intended for use in complex SoCs. A very large number of new and existing products utilize embedded memory, and a large number of companies manufacture and market these products. Because of these factors, policing the unauthorized use of our intellectual property is difficult and expensive. We cannot be certain that we will be able to detect unauthorized use of our technology or prevent other parties from designing and marketing unauthorized products based on our technology. In the event we identify any past or present infringement of our patents, copyrights or trademarks, or any violation of our trade secrets, confidentiality procedures or licensing agreements, we cannot assure you that the steps taken by us to protect our proprietary information will be adequate to prevent misappropriation of our technology. Our inability to protect adequately our intellectual property would reduce significantly the barriers of entry for directly competing technologies and could reduce the value of our technology. Furthermore, we might initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. Litigation by us could result in significant expense and divert the efforts of our technical and management personnel, whether or not such litigation results in a determination favorable to us.

Our existing patents might not provide us with sufficient protection of our intellectual property, and our patent applications might not result in the issuance of patents, either of which could reduce the value of our core technology and harm our business.

We rely on a combination of patents, trademarks, copyrights, trade secret laws and confidentiality procedures to protect our intellectual property rights. As of November 30, 2010, we held approximately 108 patents in the United States, and approximately 54 corresponding foreign patents, which expire at various times from 2012 to 2027. In addition, as of November 30, 2010, we had approximately 71 patent applications pending worldwide. We cannot be sure that any patents will issue from any of our pending applications or that any claims allowed from pending applications will be of sufficient scope or strength, or issued in all countries where our products can be sold, to provide meaningful protection or any commercial advantage to us. Also, competitors might be able to design around our patents. Failure of our patents or patent applications to provide meaningful protection might allow others to utilize our technology without any compensation to us and impair our ability to increase our licensing revenue.

The discovery of defects in our technology could expose us to liability for damages.

The discovery of a defect in our technologies could lead our licensees to seek damages from us. Some of our license agreements include provisions waiving implied warranties regarding our technology and limiting our liability to our licensees. We cannot be certain, however, that the waivers or limitations of liability contained in our license contracts will be enforceable.

Our failure to manage the expansion of our operations could reduce our potential revenue and threaten our future profitability.

Edgar Filing: MoSys, Inc. - Form 424B5

The size of our company has increased substantially as we have grown from 43 employees in January 2001 to 163 employees in November 2010, largely due to the acquisition of Prism Circuits, Inc. in 2009. In 2007, we had significantly expanded our foreign operations and headcount, as a result of the Atmel and LDIC acquisitions, but we subsequently terminated those operations at significant cost. The efficient management of our planned expansion of the development, licensing and marketing of our technology, including through the acquisition of other companies will require us to continue to:

S-11

- implement and manage new marketing channels to penetrate different and broader markets for our technologies;
- manage an increasing number of complex relationships with licensees and co-marketers and their customers and other third parties;
- expand our capabilities to deliver our technologies to our customers;
- improve our operating systems, procedures and financial controls on a timely basis;
- hire additional key management and technical personnel; and
- expand, train and manage our workforce and, in particular, our development, sales, marketing and support organizations.

We cannot assure you that we will adequately manage our growth or meet the foregoing objectives. A failure to do so could jeopardize our future revenues, adversely impact our results of operations and cause our stock price to fall.

If we fail to retain key personnel, our business and growth could be negatively affected.

Our business has been dependent to a significant degree upon the services of a small number of executive officers and technical employees. The loss of any key personnel, in particular our chief executive officer, Leonard Perham, could negatively impact our technology development efforts, our ability to deliver under our existing agreements, maintain strategic relationships with our partners, and obtain new customers. We generally have not entered into employment or non-competition agreements with any of our employees and do not maintain key-man life insurance on the lives of any of our key personnel.

Our failure to successfully address the potential difficulties associated with our international operations could increase our costs of operation and negatively impact our revenue.

We are subject to many difficulties posed by doing business internationally, including:

- foreign currency exchange fluctuations;

- unanticipated changes in local regulation;
- potentially adverse tax consequences, such as withholding taxes;
- political and economic instability; and
- reduced or limited protection of our intellectual property.

Because we anticipate that licenses to companies that operate primarily outside the United States will account for a substantial portion of our licensing revenue in future periods, the occurrence of any of these circumstances could significantly increase our costs of operation, delay the timing of our revenue and harm our profitability.

Any acquisitions we make could disrupt our business and harm our financial condition.

As part of our growth strategy, we might consider opportunities to acquire other businesses or technologies that would complement our current offerings, expand the breadth of our markets or enhance our technical capabilities. To date, we have acquired MagnaLynx, Inc. in March 2010, purchased assets from Prism Circuits in June 2009, purchased assets from Atmel Corporation and LDIC in July and August 2007 and acquired Atmos Corporation (Atmos) in 2002. In 2004, we commenced the shutdown of the Atmos operations. In December 2008, we announced the exit of the product lines related to the assets purchased from Atmel and LDIC.

Edgar Filing: MoSys, Inc. - Form 424B5

The total cost of this shutdown was approximately \$1.6 million, which is in addition to the losses we incurred while we owned and operated these product lines. Acquisitions that we may do in the future will present a number of potential challenges that could, if not overcome, disrupt our business operations, substantially increase our operating expenses, negatively affect our operating results and cash flows and reduce the value to us of the acquired company or assets purchased, including:

- uncertainty related to future revenues;
- increased operating expenses and cost structure;
- integration of the acquired employees, operations, technologies and products with our existing business and products;
- focusing management's time and attention on our core business;
- retention of business relationships with suppliers and customers of the acquired business;
- entering markets in which we lack prior experience;
- retention of key employees of the acquired business;
- difficulties and delays in the further development, production, testing and marketing of the acquired technologies; and
- amortization of intangible assets, write-offs, stock-based compensation and other charges relating to the acquired business and our acquisition costs.

We may not achieve the anticipated benefits of becoming a fabless semiconductor company by developing and bringing to market the Bandwidth Engine integrated circuit product line.

In February 2010, we announced the expansion of our business model to become a fabless semiconductor company with the production of the Bandwidth Engine family of ICs. Our goal is to increase our total available market by creating high-performance integrated circuits for networking systems. We may not achieve these and other anticipated benefits as the result of various risks and uncertainties, including, but not

limited to, the following:

- the extent of customer acceptance of the Bandwidth Engine ICs;
- difficulties and delays in the development, production, testing and marketing of the Bandwidth Engine ICs;
- the anticipated costs and technological risks of developing and bringing ICs to market;
- the willingness of our manufacturing partners to assist with the successful fabrication of Bandwidth Engine ICs;
- the availability of quantities of ICs supplied by our manufacturing partners at a competitive cost;
- our ability to generate the desired gross margin percentages and return on our product development investment;
- competition for our Bandwidth Engine ICs from established IC suppliers;
- the adequacy of our intellectual property protection for our proprietary IC designs and technologies;
- the vigor and growth of markets served by licensees, customers and prospects and of our operations; and
- our lack of recent experience as a fabless semiconductor company making and selling proprietary ICs.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products could reduce our ability to compete and could harm our business.

We intend to continue spending substantial amounts to grow our business. Although we believe that we have, or will have upon completion of the offering, access to capital sufficient to satisfy our working capital requirements for at least the next 12 months, we may need to obtain additional financing to pursue our business strategy, develop new products, respond to competition and market opportunities and acquire complementary businesses or technologies. We may not be able to obtain such financing on favorable terms or at all.

If we were to raise additional capital through sales of our equity securities, our stockholders would suffer dilution of their equity ownership. If we engage in debt financing, we may be required to accept terms that restrict our ability to incur additional indebtedness, prohibit us from paying dividends, repurchasing our stock or making investments, and force us to maintain specified liquidity or other ratios, any of which could harm our business, operating results and financial condition. If we need additional capital and cannot raise it on acceptable terms, we may not be able to, among other things:

- develop or enhance our products;
- continue to expand our product development and sales and marketing organizations;
- acquire complementary technologies, products or businesses;
- expand operations, in the United States or internationally;
- hire, train and retain employees; or
- respond to competitive pressures or unanticipated working capital requirements.

Our failure to do any of these things could seriously harm our ability to execute our business strategy and may force us to curtail our research and development plans or existing operations.

RISKS RELATING TO OUR COMMON STOCK AND THE OFFERING

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

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

If you purchase the common stock sold in this offering, you will experience immediate and substantial dilution in your investment. You will experience further dilution if we issue additional equity securities in future fundraising transactions.

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. Based on the public offering price of \$4.00 per share for 4,450,000 shares of common stock and \$4.38 per share for the 505,000 shares of common stock being purchased by insiders of ours and our net tangible book value as of September 30, 2010, if you purchase shares of common stock in this offering at \$4.00 per share, you will suffer immediate and substantial dilution of \$2.89 per share with respect to the net tangible book value of the common stock. See the section entitled "Dilution" for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

In addition, we have a significant number of stock options outstanding. To the extent that outstanding stock options have been or may be exercised or other shares issued, investors purchasing our common stock in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders or result in downward pressure on the price of our common stock.

Provisions of our certificate of incorporation and bylaws or Delaware law might delay or prevent a change of control transaction and depress the market price of our stock.

Various provisions of our certificate of incorporation and bylaws might have the effect of making it more difficult for a third party to acquire, or discouraging a third party from attempting to acquire, control of our company. These provisions could limit the price that certain investors might be willing to pay in the future for shares of our common stock. Certain of these provisions eliminate cumulative voting in the election of directors, limit the right of stockholders to call special meetings and establish specific procedures for director nominations by stockholders and the submission of other proposals for consideration at stockholder meetings.

We are also subject to provisions of Delaware law which could delay or make more difficult a merger, tender offer or proxy contest involving our company. In particular, Section 203 of the Delaware General Corporation Law prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years unless specific conditions are met. Any of these provisions could have the effect of delaying, deferring or preventing a change in control, including without limitation, discouraging a proxy contest or making more difficult the acquisition of a substantial block of our common stock.

Our board of directors may issue up to 20,000,000 shares of preferred stock without stockholder approval on such terms as the board might determine. The rights of the holders of common stock will be subject to, and might be adversely affected by, the rights of the holders of any preferred stock that might be issued in the future.

Our stockholder rights plan could prevent stockholders from receiving a premium over the market price for their shares from a potential acquirer.

We adopted a stockholder rights plan that generally entitles our stockholders to rights to acquire additional shares of our common stock when a third party acquires 15.0% of our common stock or commences or announces its intent to commence a tender offer for at least 15.0% of our common stock, other than for one stockholder and his affiliates who beneficially owned a substantial number of shares of our common stock at the time of the plan's adoption, as to whom this threshold is 20.0%. The plan also includes an exception to permit the acquisition of shares representing more than 15% of our common stock by a brokerage firm that manages independent customer accounts and generally does not have any discretionary voting power with respect to such shares. This plan could delay, deter or prevent an investor from acquiring us in a transaction that could otherwise result in stockholders receiving a premium over the market price for their shares of common stock. Our intention is to maintain and enforce the terms of this plan, which could delay, deter or prevent an investor from acquiring us in a transaction that could otherwise result in stockholders receiving a premium over the market price for their shares of common stock.

Potential volatility of the price of our common stock could negatively affect your investment.

We cannot assure you that there will continue to be an active trading market for our common stock. Recently, the stock market, as well as our common stock, has experienced significant price and volume fluctuations. Market prices of securities of technology companies have been highly volatile and frequently reach levels that bear no relationship to the operating performance of such companies. These market prices generally are not sustainable and are subject to wide variations. If our common stock trades to unsustainably high levels, it is likely that the market price of our common stock will thereafter experience a material decline. In each of 2007 and 2008, our board of directors approved stock repurchase programs, the latter of which expired in October 2009. Any future program could impact the price of our common stock and increase volatility.

In the past, securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. We could be the target of similar litigation in the future. Securities litigation could cause us to incur substantial costs, divert management's attention and resources, harm our reputation in the industry and the securities markets and negatively impact our operating results.

Our stock price could drop, and there could be significantly less trading activity in our stock, if securities or industry analysts downgrade our stock or do not publish research or reports about our business.

Our stock price and the trading market for our stock are likely to be affected significantly by the research and reports concerning our company and our business which are published by industry and securities analysts. We do not have any influence or control over these analysts, their reports or their recommendations. Our stock price and the trading market for our stock could be negatively affected if any analyst downgrades our stock, publishes a report which is critical of our business, or discontinues coverage of us.

A limited number of stockholders will have the ability to influence the outcome of director elections and other matters requiring stockholder approval.

Our executive officers, directors and entities affiliated with them will, in the aggregate, beneficially own a significant portion of our outstanding common stock. These stockholders acting together will have the ability to exert substantial influence over all matters requiring the approval of

Edgar Filing: MoSys, Inc. - Form 424B5

our stockholders, including the election and removal of directors and any proposed acquisition, consolidation or sale of all or substantially all of our assets. In addition, they could dictate the management of our business and affairs. This concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding an acquisition, consolidation, takeover or other business combination, which might otherwise involve the payment of a premium for your shares of our common stock.

S-16

USE OF PROCEEDS

We estimate that our net proceeds from our sale of 4,955,000 shares in this offering at an offering price of \$4.00 per share for 4,450,000 shares of common stock and \$4.38 per share for the 505,000 shares of common stock being purchased by insiders of ours, after deducting estimated offering expenses payable by us, will be approximately \$19.9 million.

We intend to use all the net proceeds we receive from our sale of shares in this offering for general corporate purposes.

DILUTION

Our unaudited net tangible book value as of September 30, 2010 was \$21.4 million, or \$0.67 per share. Net tangible book value per share represents the total amount of our tangible assets reduced by the total amount of our liabilities and divided by the number of shares outstanding on September 30, 2010 of 32,063,265.

Our unaudited net tangible book value at September 30, 2010, as adjusted after giving effect to the issuance and sale by us of 4,955,000 shares in this offering, would be \$41.3 million, or \$1.11 per share based on 37,018,265 shares outstanding upon completion of this offering.

Based on an assumed public offering price of \$4.00 per share for 4,450,000 shares of common stock and \$4.38 per share for 505,000 shares of common stock being purchased by insiders of ours, this represents an immediate increase in pro forma net tangible book value at September 30, 2010 of \$0.44 per share to existing shareholders and an immediate dilution of \$2.89 per share to new investors purchasing our shares in this offering at \$4.00 per share.

Dilution per share represents the difference between the price per share to be paid for the shares sold by us in this offering and the pro forma net tangible book value per share immediately after this offering. The following table illustrates this per share dilution for purchasers of common stock at \$4.00 per share:

Assumed public offering price per share		\$	4.00
Net tangible book value per share as of September 30, 2010	\$	0.67	
Increase in net tangible book value per share attributable to new investors		0.44	
Net tangible book value per share after the offering			1.11
Dilution per share to new investors in this offering		\$	2.89

The foregoing table excludes the following, each as of September 30, 2010:

Edgar Filing: MoSys, Inc. - Form 424B5

- 5,047,397 shares of common stock issuable upon exercise of outstanding exercisable stock options with a weighted average exercise price of approximately \$4.84 per share;
- 5,652,878 shares of common stock issuable upon exercise of outstanding stock options that are not exercisable;
- 30,683 shares of common stock issuable upon the vesting of outstanding unvested restricted stock unit awards;
- 3,900,000 shares of common stock available for future issuance under our stock option plans; and
- 2,000,000 shares of common stock available for sale under our employee stock purchase plan.

S-17

DESCRIPTION OF CAPITAL STOCK

General

The following description of our capital stock and provisions of our certificate of incorporation and bylaws is a summary only and not a complete description.

Our authorized capital stock consists of 120,000,000 shares of common stock, par value \$0.01 per share, and 20,000,000 shares of preferred stock, par value \$0.01 per share.

Common Stock

As of November 30, 2010, 32,183,892 shares of our common stock were outstanding and held of record by 23 stockholders. Each holder of our common stock is entitled to

- one vote per share on all matters submitted to a vote of the stockholders;
- dividends as may be declared by our board of directors out of funds legally available for that purpose, subject to the rights of any preferred stock that may be outstanding; and
- his, her or its pro rata share in any distribution of our assets after payment or providing for the payment of liabilities and the liquidation preference of any outstanding preferred stock in the event of liquidation.

Holders of common stock have no cumulative voting rights, redemption rights or preemptive rights to purchase or subscribe for any shares of our common stock or other securities. All of the outstanding shares of common stock are fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future

Preferred Stock

Edgar Filing: MoSys, Inc. - Form 424B5

We have designated 120,000 shares of our preferred stock as Series AA preferred stock for issuance pursuant to the exercise of rights under our rights plan, none of which are outstanding. For more information on the rights plan, see the discussion below under Antitakeover Effects of Our Rights Plan . We have no current intention to issue any other shares of preferred stock.

Our board of directors has the authority, subject to any limitations prescribed by Delaware law, to issue shares of preferred stock in one or more series and to fix and determine the relative rights and preferences of the shares constituting any series to be established, without any further vote or action by the stockholders. Any shares of our preferred stock so issued may have priority over our common stock with respect to dividend, liquidation and other rights.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Although the issuance of preferred stock could provide us with flexibility in connection with possible acquisitions and other corporate purposes, under some circumstances, it could have the effect of delaying, deferring or preventing a change of control.

Our board of directors may authorize the issuance of our preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Although the issuance of our preferred stock could provide us with flexibility in connection with possible acquisitions and other corporate purposes, under some circumstances, it could have the effect of delaying, deferring or preventing a change of control.

Antitakeover Effects of Provisions of Our Certificate of Incorporation and Bylaws and of Delaware Law.

Certain provisions of our charter documents and Delaware law could have an antitakeover effect and could delay, discourage or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might otherwise result in a premium being paid over the market price of our common stock.

Certificate of Incorporation and Bylaws. Our certificate of incorporation provides that stockholders can take action only at a duly called annual or special meeting of the stockholders and not by written consent. At the same time, our bylaws provide that special meetings of stockholders may be called only by our chairman of the board, our chief executive officer, any officer at the request in writing of a majority of the directors or by the holders of at least 25% of our outstanding shares. These provisions could delay consideration of a stockholder proposal until the next annual meeting.

Our bylaws provide for an advance notice procedure for the nomination, other than by or at the direction of our board of directors, of candidates for election as directors, as well as for other stockholder proposals to be considered at annual meetings of stockholders. In addition, under our bylaws newly created directorships resulting from any increase in the number of directors or any vacancies in the board resulting from death, resignation, retirement, disqualification, removal from office or other cause during a director's term in office can be filled by the vote of the remaining directors in office, and the board is expressly authorized to amend the bylaws without stockholder consent. These provisions may preclude a third party from removing incumbent directors and can control of our board of directors. Accordingly, these provisions could discourage a third party from initiating a proxy contest, making a tender offer or otherwise attempting to gain control of our company.

Delaware Takeover Statute. Section 203 of the Delaware General Corporation Law, or DGCL, generally prohibits a publicly-held Delaware corporation from engaging in an acquisition, asset sale or other transaction resulting in a financial benefit to any person who, together with affiliates and associates, owns, or within three years did own, 15% or more of a corporation's voting stock. The prohibition continues for a period of three years after the date of the transaction in which the person becomes an owner of 15% or more of the corporation's voting stock, unless the business combination is approved in a prescribed manner. The statute could prohibit, delay, defer or prevent a change in control with respect to our company.

Antitakeover Effects of Our Stockholder Rights Plan

On November 10, 2010, we entered into a rights plan that is intended to protect and maximize the value of our outstanding equity interests in the event of an unsolicited attempt by an acquiror to take over our company in a manner or on terms not approved by the board of directors. This rights plan extends protections similar to those provided by our previous rights plan which expired on October 10, 2010. The rights plan provides protection by imposing economic disincentives that are triggered by specified acquisitions of or offers for our common stock, as detailed below:

Each right entitles the registered holder to purchase one one-thousandth of a share of our Series AA preferred stock, \$0.01 par value per share, or the preferred shares, at a price of \$48.00 per one one-thousandth of a preferred share, subject to adjustment.

The rights will not be exercisable until the distribution date, which is defined as the date that is the earlier of -

Edgar Filing: MoSys, Inc. - Form 424B5

- 10 days after a public announcement that a person or group of affiliated or associated persons have acquired beneficial ownership of 15% or more of the outstanding shares of our common stock, other than a person or such a group that obtains the prior written approval of the board of directors, or holders of grandfathered stock as defined below, or
- 10 business days, or such later date as may be determined by action of the board of directors prior to such time as any person acquires beneficial ownership of 15% or more of the outstanding shares of our common stock after the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 15% or more of such outstanding shares of common stock, unless our board of directors has approved the offer.

S-19

A person who, together with any affiliates and associates of that person, beneficially owns 15% or more of the outstanding shares of our common stock, subject to certain exceptions, is referred to as an acquiring person in the rights agreement.

Holders of grandfathered stock are subject to higher ownership thresholds prior to being deemed an acquiring person or triggering a distribution date through their ownership of shares of our common stock. Grandfathered stock refers to stock held by Carl E. Berg, his affiliates and associates, heirs, legatees, personal representatives, any trusts formed for his benefit and members of his immediate family as well as their respective affiliates and associates. The beneficial ownership threshold for a holder of grandfathered stock is 20%, rather than 15% as set forth above, for purposes of being deemed an acquiring person and triggering a distribution date through beneficial ownership of our common stock. Under the rights agreement, the firm of Ingalls & Snyder, or I&S, and its managed account beneficial owners collectively are not deemed to be an acquiring person as long as none of their shares are held for the purpose of acquiring control or effecting change or influence in control of us. This exclusion applies only to shares of common stock for which there is only shared dispositive power and I&S has only non-discretionary voting power.

The rights agreement provides that, until the distribution date, the rights will be transferred with and only with the shares of common stock. Until the distribution date or earlier redemption or expiration of the rights, new common stock certificates issued after the record date, upon transfer or new issuance of shares of common stock, will contain a notation incorporating the rights agreement by reference. Until the distribution date or earlier redemption or expiration of the rights, the surrender for transfer of any certificates for shares of common stock outstanding as of the record date, even without such notation, will also constitute the transfer of the rights associated with the shares of common stock represented by such certificate. As soon as practicable following the distribution date, separate certificates evidencing the rights will be mailed to holders of record of the shares of common stock as of the close of business on the distribution date, and such separate right certificates alone will evidence the rights.

The rights will expire on November 10, 2020, unless the rights are earlier redeemed or exchanged by us, in each case as described below.

Following the distribution date, and until one of the further events described below, holders of the rights will be entitled to receive, upon exercise and the payment of the purchase price, one one-thousandth of a preferred share.

In the event that any person or group of affiliated or associated persons becomes an acquiring person, each holder of a right will thereafter have the right to receive upon exercise of the right, in lieu of one one-thousandth of a preferred share, that number of shares of our common stock having a market value of two times the exercise price of the right. In the event there are insufficient authorized shares of common stock, we may substitute consideration such as cash, property, or other securities of our company. Rights beneficially owned by an acquiring person (and its affiliates, associates and certain persons to whom it transfers shares of our common stock) will automatically become void.

If, following the date on which any person or group of affiliated or associated persons becomes an acquiring person, we are acquired in a merger or other business combination transaction or 50% or more of its consolidated assets or earning power are sold, each holder of a right will thereafter have the right to receive upon the exercise of the right, in lieu of one one-thousandth of a preferred share, that number of shares of common stock of the acquiring company (or an affiliate of the acquiring company under certain circumstances) which at the time of such transaction will have a market value of two times the exercise price of the right. The acquiring person shall also assume our obligations under the rights agreement.

Edgar Filing: MoSys, Inc. - Form 424B5

At any time after the acquisition by a person or group of affiliated or associated persons of beneficial ownership of 15% or more of the outstanding shares of common stock and prior to the acquisition by such person or group of 50% or more of the outstanding shares of common stock, our board of directors may exchange the rights, other than rights owned by such person or group which have become void, in whole or in part, at an exchange ratio of one share of common stock, or one one-thousandth of a preferred share per right, subject to adjustment.

S-20

Edgar Filing: MoSys, Inc. - Form 424B5

At any time before a person becomes an acquiring person, our board of directors may redeem the rights in whole, but not in part, at a price of \$0.01 per right. After the redemption period has expired, our rights of redemption may be reinstated if, prior to completion of certain recapitalizations, mergers or other business combinations, an acquiring person reduces its beneficial ownership to less than 10% of the outstanding shares of common stock in a transaction or series of transactions not involving us. The redemption of the rights may be made effective at such time, on such basis and with such conditions as the board of directors in its sole discretion may establish. Immediately upon any redemption of the rights, the right to exercise the rights will terminate and the only right of the holders of rights will be to receive the redemption price.

The purchase price payable, and the number of preferred shares or other securities or property issuable, upon exercise of the rights are subject to adjustment from time to time in connection with dilutive issuances. With certain exceptions, no adjustment in the purchase price will be required until cumulative adjustments require an adjustment in such purchase price of at least 1%.

No fractional preferred shares will be issued, other than fractions which are integral multiples of one one-thousandth of a preferred share, which may, at our election, be evidenced by depository receipts. In lieu of the issuance of fractional shares, an adjustment in cash will be made based on the market price of the preferred shares on the last trading day prior to the date of exercise.

Until a right is exercised, the holder of a right will not, by reason of being such a holder, have rights as a stockholder of our company, including, without limitation, the right to vote or to receive dividends. While the distribution of the rights will not be taxable to our stockholders, stockholders may, depending on the circumstances, recognize taxable income if the rights become exercisable or upon the commencement of certain events thereafter.

The terms of the rights may be amended by our board of directors without the consent of the holders of the rights, including an amendment to lower certain thresholds described above to not less than the greater of any percentage greater than the largest percentage of the outstanding shares of common stock then known to us to be beneficially owned by any person or group of affiliated or associated persons, unless such person or group is excluded from the effect of such reduction, and 10%, except that from and after such time as any person becomes an acquiring person no such amendment may adversely affect the interests of the holders of the rights.

Preferred shares purchasable upon exercise of the rights shall have the following rights and preferences:

- Preferred shares will not be redeemable.
- Each one one-thousandth of a preferred share will be entitled to a minimum preferential dividend payment equal to the dividend declared on each share of common stock.
- In the event of liquidation, the holders of the preferred shares will be entitled to a preferential liquidation payment per each one-thousandth of a preferred share equal to the greater of (1) the payment made per share of common stock and (2) \$0.048, plus accrued and unpaid dividends.

Edgar Filing: MoSys, Inc. - Form 424B5

- Each one one-thousandth of a preferred share will have one vote, voting together with the common stock.
- In the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each one one-thousandth of a preferred share will be entitled to receive an amount equal to the amount received per share of common stock.
- The rights of the preferred shares will be protected by customary antidilution provisions.

S-21

Because of the nature of the preferred shares' dividend, liquidation and voting rights, the value of the one one-thousandth interest in a preferred share purchasable upon exercise of each right should approximate the value of one share of common stock.

The rights are not intended to prevent a takeover of our company and will not do so. We may redeem the rights at \$0.01 per right within ten days after the accumulation of 15% or more of our shares by a single acquiror or group. Accordingly, the rights should not interfere with any merger or business combination approved by our board of directors.

Transfer Agent

The transfer agent and registrar for our common stock is Wells Fargo Bank, National Association.

PLAN OF DISTRIBUTION

We will enter into a purchase agreement with each purchaser of the shares of common stock we are offering under this prospectus supplement. Under each purchase agreement, the purchaser will agree to purchase a specified number of shares of common stock, and we will agree to sell the shares to the purchaser. The price per share to all purchasers is \$4.00, except that Leonard Perham, our chief executive officer, is purchasing 275,000 shares at \$4.38 per share and Berg & Berg Enterprises LLC, an affiliate of one of our directors, Carl E. Berg, is purchasing 230,000 shares at \$4.38 per share.

The shares of common stock sold in this offering will be listed on the NASDAQ Global Market. We expect that the closing of the sale of our common stock under this prospectus supplement will take place on or about December 10, 2010, at which time our shares will be delivered to the investor in book-entry form through The Depository Trust Company, New York, New York. We are not using any placement agent or underwriter in connection with this offering.

The expenses directly related to this offering are estimated to be less than \$125,000 and will be paid by us. Expenses of the offering include our legal and accounting fees, printing expenses, transfer agent fees and miscellaneous fees and costs related to the offering.

The transfer agent for our common stock is Wells Fargo Bank, National Association. Our common stock is traded on the Global Market of the NASDAQ Stock Market under the symbol MOSY.

LEGAL MATTERS

The validity of the issuance of shares of common stock offered hereby has been passed upon for us by Bingham McCutchen LLP, East Palo Alto, California.

EXPERTS

The consolidated financial statements and related financial statement schedule of MoSys, Inc. as of December 31, 2009 and 2008 and for each of the three years in the period ended December 31, 2009, incorporated in this Registration Statement on Form S-3 by reference to MoSys, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009, have been so incorporated in reliance on the report of Burr Pilger Mayer, Inc., an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

Edgar Filing: MoSys, Inc. - Form 424B5

We file annual, quarterly and special reports and other information with the SEC. In addition, we have filed with the SEC a Registration Statement on Form S-3, of which this prospectus supplement and the accompanying prospectus is a part, under the Securities Act, with respect to the shares of common stock offered hereby. You may read and obtain copies at prescribed rates of any document that we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to you free of charge at the SEC's web site at <http://www.sec.gov>, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Our common stock is traded on the Global Market of the NASDAQ Stock Market. Material filed by us can be inspected at the offices of the Financial Industry Regulatory Authority, 1735 K Street, N.W., Washington, D.C. 20006.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be part of the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below:

S-23

Edgar Filing: MoSys, Inc. - Form 424B5

- (a) our Registration Statement on Form 8-A, filed with the SEC on June 26, 2001, as amended by Amendment No. 2 to Registration Statement on Form 8-A/A, filed with the SEC on November 12, 2010;
- (b) our Annual Report on Form 10-K and Form 10-K/A for the fiscal year ended December 31, 2009, filed with the SEC on March 26, 2010 and April 30, 2010, respectively;
- (c) our Quarterly Report on Form 10-Q for the three months ended March 31, 2010, filed with the SEC on May 12, 2010;
- (d) our Quarterly Report on Form 10-Q for the three months ended June 30, 2010, filed with the SEC on August 13, 2010;
- (e) our Quarterly Report on Form 10-Q for the three months ended September 30, 2010, filed with the SEC on November 3, 2010;
- (f) our definitive proxy statement on Schedule 14A filed with the SEC on May 26, 2010;
- (g) our Current Report on Form 8-K filed with the SEC on July 6, 2010;
- (h) our Current Report on Form 8-K filed with the SEC on July 22, 2010; and
- (i) our Current Report on Form 8-K filed with the SEC on November 12, 2010.

In addition, all filed information contained in reports and documents filed with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of filing the registration statement that includes the accompanying prospectus and prior to the filing of a post-effective amendment to the registration statement containing the accompanying prospectus, which indicates that all securities offered have been sold or which deregisters all of such securities then remaining unsold, shall be deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus and to be a part thereof from the respective dates of filing of such documents.

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

MoSys, Inc.

3301 Olcott Street

Edgar Filing: MoSys, Inc. - Form 424B5

Santa Clara, CA 95054

(408) 418-7500

Attention: Chief Financial Officer

In addition, you may obtain a copy of these filings from the SEC as described above in the section entitled [Where You Can Find More Information](#).

S-24

Table of Contents

PROSPECTUS

\$50,000,000

Debt Securities

Preferred Stock

Common Stock

Warrants

MoSys, Inc.

3301 Olcott Street

Santa Clara, CA 95054

(408) 418-7500

We may offer from time to time:

- Debt securities;
- Shares of our Common Stock;
- Shares of our Preferred Stock; and

- Warrants to purchase any of the other securities that may be sold under this prospectus.

The securities we offer will have an aggregate public offering price of up to \$50 million. We will provide specific terms of any offering in supplements to this prospectus. The securities may be offered separately or together in any combination and as separate series. You should read this prospectus and any prospectus supplement carefully before you invest.

We may sell these securities on a continuous or delayed basis directly, through agents, dealers or underwriters as designated from time to time, or through a combination of these methods. We reserve the sole right to accept, and together with any agents, dealers and underwriters, reserve the right to reject, in whole or in part, any proposed purchase of securities. If any agents, dealers or underwriters are involved in the sale of any securities, the applicable prospectus supplement will set forth any applicable commissions or discounts. Our net proceeds from the sale of securities also will be set forth in the applicable prospectus supplement.

Our common stock is listed on the Global Market of the NASDAQ Stock Market under the symbol MOSY.

INVESTING IN OUR SECURITIES INVOLVES RISKS.

SEE RISK FACTORS ON PAGE 4.

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

The date of this prospectus is November 3, 2010.

Table of Contents

TABLE OF CONTENTS

<u>About This Prospectus</u>	2
<u>Special Note Regarding Forward-Looking Statements</u>	3
<u>Our Company</u>	3
<u>Risk Factors</u>	4
<u>Ratio Of Earnings To Fixed Charges</u>	4
<u>Use Of Proceeds</u>	4
<u>General Description Of Securities That We May Sell</u>	4
<u>Description Of Debt Securities</u>	5
<u>Description Of Capital Stock</u>	13
<u>Description Of Warrants</u>	15
<u>Plan Of Distribution</u>	16
<u>Experts</u>	18
<u>Legal Matters</u>	18
<u>Where You Can Find More Information</u>	18
<u>Incorporation By Reference</u>	18

In this prospectus, MoSys, we, us, and our refer to MoSys, Inc. and its subsidiaries.

You should rely only on information contained or incorporated by reference in this prospectus. We have not authorized any person to provide you with information that differs from what is contained or incorporated by reference in this prospectus. If any person does provide you with information that differs from what is contained or incorporated by reference in this prospectus, you should not rely on it. This prospectus is not an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates, or an offer of solicitation in any jurisdiction where offers or sales are not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, even though this prospectus may be delivered or shares may be sold under this prospectus on a later date.

About This Prospectus

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under the shelf process, we may, from time to time, issue and sell to the public any or all of the securities described in the

Edgar Filing: MoSys, Inc. - Form 424B5

registration statement in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide a prospectus supplement that will describe the specific amounts, prices, and terms of the securities we offer. The prospectus supplement also may add, update, or change information contained in this prospectus. This prospectus, together with applicable prospectus supplements, includes all material information relating to this offering. If there is any inconsistency between the information in this prospectus and the information in the accompanying prospectus supplement, you should rely on the information in the prospectus supplement.

Table of Contents

Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under the section entitled "Where You Can Find More Information."

We may sell the securities to or through underwriters, dealers, or agents or directly to purchasers. We and our agents reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. A prospectus supplement, which we will provide each time we offer securities, will provide the names of any underwriters, dealers or agents involved in the sale of the securities, and any applicable fee, commission, or discount arrangements with them.

Special Note Regarding Forward-Looking Statements

Some of the statements in this prospectus constitute forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by such forward-looking statements. These factors include, among others, those incorporated by reference under "Risk Factors" below.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "predicts," "potential," or "continue" or similar terms.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors incorporated by reference under the heading "Risk Factors" below and a variety of other factors, including, without limitation, statements about our future business operations and results, the market for our technology, our strategy and competition.

Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these statements. We undertake no obligation to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In light of these risks, uncertainties and assumptions, the forward-looking events discussed or incorporated by reference in this prospectus may not occur.

Our Company

We design, develop, market and license embedded memory intellectual property, or IP, used by the semiconductor industry and electronic product manufacturers. We have developed a patented semiconductor memory technology, called 1T-SRAM, which offers a combination of high density, low power consumption and high-speed at performance and cost levels that other available memory technologies do not match. We license this technology to companies that incorporate, or embed, memory on complex integrated circuits, or ICs, such as system-on-chips, or SoCs.

Our innovative 1T-SRAM technologies provide major advantages over traditional SRAM in density, power consumption and cost, making it more economical for designers to incorporate large amounts of embedded memory in their designs. In addition, our 1T-SRAM technologies offer all the benefits of traditional SRAM, such as high-speed, simple interface and ease of manufacturability. Our 1T-SRAM technologies can achieve these advantages while utilizing standard logic manufacturing processes and providing the simple, standard SRAM interface that designers are accustomed to.

We also design, develop, market and license high-speed parallel and serial interface, or I/O, IP used by the semiconductor industry and electronic product manufacturers. Interface IP includes physical layer circuitry that allows ICs to communicate with each other or to discrete memory devices in networking, storage, computer and consumer devices. We support serial I/O technologies such as 10G KR, XAUI, PCI Express and SATA, as well as parallel interfaces like DDR3.

In February 2010, we announced the commencement of a new product initiative to develop a family of IC products under the Bandwidth Engine product name. The Bandwidth Engine will combine our 1T-SRAM high-density embedded memory with our high-speed 10 Gigabits per second serial communication I/O technology and will initially be marketed to networking systems companies. The Bandwidth Engine is being designed to increase

Table of Contents

system performance by using a serial I/O to increase the accesses per second between the processor and memory component in networking systems.

We generate revenue from the licensing of our memory and I/O technology, and our customers pay us fees for licensing, non-recurring engineering services, royalties, and maintenance and support. We offer our memory and I/O technology on a worldwide basis to semiconductor companies, electronic product manufacturers, foundries, intellectual property companies and design companies through product development, technology licensing and joint marketing relationships.

We license our technology to semiconductor companies who incorporate our technology into ICs that they sell to their customers. We also sell to system companies that design application-specific integrated circuits. In addition, we engage in joint marketing activities with foundries, other IP companies and design companies to promote our technology to a wide base of customers.

We were founded in 1991. Our principal executive offices are located at 3301 Olcott Street, Santa Clara, CA 95054. Our telephone number at that address is (408) 418-7500.

Risk Factors

An investment in our common stock is risky. Prior to making a decision about investing in our common stock, you should carefully consider the specific risks discussed in our other filings with the SEC, which are incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, any applicable prospectus supplement, or otherwise incorporated by reference in this prospectus. The risks and uncertainties described in our SEC filings are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described in the applicable prospectus supplement or our SEC filings or any such additional risks and uncertainties actually occur, our business, results of operations, cash flows and financial condition could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you might lose all or part of your investment.

Ratio of Earnings to Fixed Charges

If we offer debt securities and/or preference equity securities under this prospectus, then we will, at that time, provide a ratio of earnings to fixed charges and/or ratio of combined fixed charges and preference dividends to earnings, respectively, in the applicable prospectus supplement for such offering.

Use of Proceeds

Edgar Filing: MoSys, Inc. - Form 424B5

We intend to use the net proceeds for working capital and other general corporate purposes, including expanding sales and marketing, research and development. We also might use a portion of the net proceeds for the acquisition of technologies, business or products that are complementary to our business, although no such acquisitions are planned or being negotiated as of the date of this prospectus, and no portion of the net proceeds has been allocated for any specific acquisition.

The amounts we plan to spend on each area of our operations, including capital expenditures, as well as the timing of any expenditures, are determined by internal planning and budgeting processes, and may change over time. Pending such uses, the net proceeds of this offering will be invested according to a cash management policy adopted by our board of directors, which includes short-term, investment-grade securities.

General Description of Securities That We May Sell

We may offer and sell, at any time and from time to time:

- Our debt securities, in one or more series, which may be senior debt securities or subordinated debt securities, in each case consisting of notes or other unsecured evidences of indebtedness;
- Shares of our common stock, par value \$0.01 per share;
- Shares of our preferred stock, par value \$0.01 per share;
- Warrants to purchase any of the other securities that may be sold under this prospectus; or

Table of Contents

- Any combination of these securities.

The terms of any securities we offer will be determined at the time of sale. We may issue debt securities that are exchangeable for and/or convertible into common stock or any of the other securities that may be sold under this prospectus. When particular securities are offered, a supplement to this prospectus will be filed with the SEC, which will describe the terms of the offering and sale of the offered securities.

Description of Debt Securities

We may issue debt securities in one or more distinct series. This section summarizes the terms of the debt securities that are common to all series. Most of the financial terms and other specific terms of any series of debt securities that we offer will be described in a prospectus supplement to be attached to the front of this prospectus. Because the terms of specific debt securities may differ from the general information we have provided below, if any information contained in a prospectus supplement contradicts the information below, you should rely on information in the prospectus supplement.

As required by federal law for all bonds and notes of companies that are publicly offered, the debt securities are governed by a document called an indenture. An indenture is a contract between us and a financial institution acting as trustee of holders of the debt securities on behalf of the holders of the debt securities. The trustee has two main roles. First, the trustee can enforce the rights of holders of the debt securities against us if we default. There are some limitations on the extent to which the trustee acts on behalf of holders of the debt securities, described later under Events of Default. Second, the trustee performs certain administrative duties for us.

The debt securities will be either senior debt securities or subordinated debt securities. We will issue the senior debt securities under a senior indenture between us and a trustee. We will issue the subordinated debt securities under a subordinated indenture between us and the same or another trustee. The senior indenture and the subordinated indenture are collectively referred to in this prospectus as the indenture, and each of the trustee under the senior indenture and the trustee under the subordinated indenture are referred to in this prospectus as the trustee. Any debt securities issued by us may be guaranteed by one or more of our subsidiaries. Unless otherwise specified in a prospectus supplement the debt securities will be direct unsecured obligations of MoSys.

Because this section is a summary, it does not describe every aspect of the debt securities and the indenture. We urge you to read the indenture because it, and not this description, defines your rights as a holder of debt securities. For example, in this section, we use capitalized words to signify terms that are specifically defined in the indenture. Some of the definitions are repeated in this prospectus, but for the rest you will need to read the indenture. We have filed the form of the indenture as an exhibit to the registration statement that we have filed with the SEC. See Where You Can Find More Information, above, for information on how to obtain a copy of the indenture.

General

Each series of debt securities, unless specified otherwise in the prospectus supplement, will be unsecured obligations of MoSys. Any senior unsecured debt securities that we issue will rank equally with all other unsecured and unsubordinated indebtedness of us. Any subordinated debt

Edgar Filing: MoSys, Inc. - Form 424B5

securities that we issue will be expressly subordinated in right of payment to the prior payment in full of our senior indebtedness. In addition, unless otherwise specified in the applicable prospectus supplement the debt securities will be structurally subordinated to all existing and future liabilities, including trade payables, of our subsidiaries that do not guarantee the debt securities, and the claims of creditors of those subsidiaries, including trade creditors, will have priority as to the assets and cash flows of those subsidiaries.

Any debt securities proposed to be sold under this prospectus and the attached prospectus supplement (offered debt securities) and any debt securities issuable upon conversion or exchange of other offered securities (underlying debt securities), as well as other unsecured debt securities, may be issued under the indenture in one or more series.

You should read the prospectus supplement for the terms of the offered debt securities, including the following:

- the title of the debt securities and whether the debt securities will be senior debt securities or subordinated debt securities of MoSys;
- the total principal amount of the debt securities and any limit on the total principal amount of debt securities of the series;

Table of Contents

- the price or prices at which MoSys will offer the debt securities;

- if not the entire principal amount of the debt securities, the portion of the principal amount payable upon acceleration of the maturity of the debt securities or how this portion will be determined;

- the date or dates, or how the date or dates will be determined or extended, when the principal of the debt securities will be payable;

- the interest rate or rates, which may be fixed or variable, that the debt securities will bear, if any, or how the rate or rates will be determined, the date or dates from which any interest will accrue or how the date or dates will be determined, the interest payment dates, any record dates for these payments and the basis upon which interest will be calculated, if other than that of a 360-day year of twelve 30-day months;

- any optional redemption provisions;

- any sinking fund or other provisions that would obligate us to repurchase or otherwise redeem the debt securities;

- if other than U.S. dollars, the currency or currencies of the debt securities;

- whether the amount of payments of principal, premium or interest, if any, on the debt securities will be determined with reference to an index, formula or other method, which could be based on one or more currencies, commodities, equity indices or other indices, and how these amounts will be determined;

- the place or places, if any, other than, or in addition to, the city of New York, of payment, transfer, conversion and/or exchange of the debt securities;

- if the denominations in which the offered debt securities will be issued are other than denominations of \$1,000 or any integral multiple of \$1,000;

- the applicability of defeasance provisions of the indenture and any provisions in modification of, in addition to, or in lieu of, any of these provisions;

Edgar Filing: MoSys, Inc. - Form 424B5

- any provisions granting special rights to the holders of the debt securities upon the occurrence of specified events;
- any changes or additions to the events of default or covenants contained in the indenture;
- whether the debt securities will be convertible into or exchangeable for any other securities and the applicable terms and conditions of conversion or exchange;
- the terms of any guarantees by any of our subsidiaries;
- subordination provisions, if any, that will apply, to the extent different from those set forth below;
- the form of note or other instrument representing the debt if not issued in book entry form; and
- any other terms of the debt securities.

Covenants

The supplemental indenture with respect to any particular series of debt securities may contain covenants including, without limitation, covenants restricting or limiting:

- the incurrence of additional debt, including guarantees, by us and our subsidiaries;
- the making of various payments by us and our subsidiaries;
- our business activities and those of our subsidiaries;
- the issuance of other securities by our subsidiaries;

- asset dispositions;

Table of Contents

- sale-leaseback transactions;
- transactions with affiliates;
- a change of control;
- the incurrence of liens; and
- mergers and consolidations involving us and our subsidiaries.

For purposes of this prospectus, any reference to the payment of principal of, or premium or interest, if any, on, debt securities will include additional amounts if required by the terms of the debt securities, subject to the maximum offering amount under this prospectus.

The indenture does not limit the amount of debt securities that may be issued thereunder from time to time. The indenture also provides that there may be more than one trustee thereunder, with respect to one or more different series of indenture securities. See Resignation of Trustee, below. At a time when two or more trustees are acting under the indenture, each with respect to only certain series, the term indenture securities means the one or more series of debt securities with respect to which each respective trustee is acting. In the event that there is more than one trustee under the indenture, the powers and trust obligations of each trustee described in this prospectus will extend only to the one or more series of indenture securities for which it is trustee. If two or more trustees are acting under the indenture, then the indenture securities for which each trustee is acting would be treated as if issued under separate indentures.

We have the ability to issue indenture securities with terms different from those of indenture securities previously issued and, without the consent of the holders thereof to reopen a previous issue of a series of indenture securities and issue additional indenture securities of that series unless the reopening was restricted when that series was created.

Methods of Calculating and Paying Interest on our Debt Securities

Each series of our debt securities will bear interest at a fixed or variable rate per annum shown on the front cover of the prospectus supplement under which that series is issued.

Provisions Relating Only to the Senior Debt Securities

The senior debt securities will rank equally in right of payment with all of our other senior and unsubordinated debt and senior in right of payment to any of our subordinated debt, including the subordinated debt securities. The senior debt securities will be effectively subordinated to all of our secured debt and to all debt, including trade debt, of our subsidiaries, except as to subsidiaries that guaranty the debt. We will disclose the amount of our secured debt in the prospectus supplement.

Provisions Relating Only to the Subordinated Debt Securities

The subordinated debt securities will rank junior in right of payment to all of our senior indebtedness. Senior indebtedness will be defined to include all notes or other evidences of debt not expressed to be subordinate or junior in right of payment to any of our other debt. The debt will be structurally subordinated to all debt, including trade debt, of our subsidiaries, except as to subsidiaries that guaranty the debt.

If the offered securities are subordinated debt securities, the supplemental indenture may provide that no cash payment of principal, interest and any premium on the subordinated debt securities may be made:

- if we fail to pay when due any amounts on any senior indebtedness;
- if our property or we are involved in any voluntary or involuntary liquidation or bankruptcy; and
- in other instances specified in the supplemental indenture.

Table of Contents

Conversion or Exchange Rights

If any series of our debt securities are convertible or exchangeable, the applicable prospectus supplement will specify:

- the type of securities into which it may be converted or exchanged;
- the conversion price or exchange ratio, or its method of calculation; and
- how the conversion price or exchange ratio may be adjusted if our debt securities are redeemed.

Events of Default

Unless otherwise specified in the applicable prospectus supplement, the following will be events of default with respect to any series of debt securities or guaranties:

- default for 30 days in the payment when due of interest on the debt securities;
- default in payment when due of the principal of or any premium on the debt securities;
- default in the performance of or breach of various covenants after applicable notice and/or grace period; and
- various events of bankruptcy or insolvency with respect to us.

The applicable prospectus supplement will describe any additional events of default.

Edgar Filing: MoSys, Inc. - Form 424B5

If an event of default occurs with respect to debt securities of a series then outstanding and is continuing, then the trustee or the holders of not less than 25% in principal amount of the debt securities of that series then outstanding, by a notice in writing to MoSys (and to the trustee, if given by the holders), may, and the trustee at the request of such holders shall, declare the principal amount (or, if the debt securities of that series are original issue discount securities, such portion of the principal amount as may be specified in the terms of that series) of, premium, if any, and accrued interest on all of the debt securities of that series to be due and payable immediately, and the same (or specified portion thereof) shall become immediately due and payable. A declaration of default under the indenture or under other payment obligations could give rise to cross-defaults and acceleration with respect to the debt securities or such other payment obligations.

At any time after a declaration of acceleration with respect to debt securities of any series (or of all series, as the case may be) has been made and before a judgment or decree for payment of the money due has been obtained by the trustee as provided in the indenture, the holders of a majority in principal amount of the debt securities of that series (or of all series, as the case may be) then outstanding, by written notice to MoSys and the trustee, may rescind such declaration and its consequences under the circumstances specified in the applicable debenture.

The indenture will provide that no such rescission shall affect any subsequent default or impair any right consequent thereon.

With respect to the debt securities of any series, the holders of not less than a majority in principal amount of the debt securities of such series then outstanding shall 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, *provided* that:

- such direction shall not be in conflict with any rule of law or with the indenture;
- the trustee may take any other action deemed proper by the trustee which is not inconsistent with such direction; and
- the trustee need not take any action which might involve it in personal liability or be unjustly prejudicial to the holders of debt securities of such series not consenting.

No holder of any debt security of any series or any related coupons shall have any right to institute any proceeding, judicial or otherwise, with respect to the indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

- the holder has previously given written notice to the trustee of a continuing event of default with respect to the debt securities of that series;
- the holders of not less than 25% in principal amount of the debt securities of that series then outstanding shall have made written request to the trustee to institute proceedings in respect of the event of default in its own name as trustee under the indenture;

Table of Contents

- such holder or holders have offered to the trustee indemnity reasonably satisfactory to the trustee against the costs, expenses and liabilities to be incurred in compliance with such request;
- the trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and
- no direction inconsistent with such written request has been given to the trustee during such 60-day period by the holders of a majority or more in principal amount of the debt securities of that series then outstanding.

However, no holder of a debt security has the right under the indenture to affect, disturb or prejudice the rights of any other holders of debt securities of the same series, or to obtain or to seek to obtain priority or preference over any other of such holders or to enforce any right under the indenture, except in the manner provided in the indenture and for the equal and ratable benefit of all holders of debt securities of the same series.

Every year we will be required to deliver to the trustee a certificate as to our performance of our obligations under the indenture and as to any defaults.

Mergers, Consolidations and Certain Sale of Assets

We may not:

- consolidate with or merge into any other person or entity or permit any other person or entity to consolidate with or merge into us in a transaction in which we are not the surviving entity, or
- transfer, lease or dispose of all or substantially all of our assets to any other person or entity unless:
- the resulting, surviving or transferee entity shall be a corporation organized and existing under the laws of the United States or any state thereof and such resulting, surviving or transferee entity shall expressly assume, by supplemental indenture, executed and delivered in form satisfactory to the trustee, all of our obligations under the debt securities and the indenture;

Edgar Filing: MoSys, Inc. - Form 424B5

- immediately after giving effect to such transaction (and treating any indebtedness which becomes an obligation of the resulting, surviving or transferee entity as a result of such transaction as having been incurred by such entity at the time of such transaction), no default or event of default would occur or be continuing; and
- we shall have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the indenture.

Modification and Waiver

The indenture will provide that MoSys and the trustee may amend or supplement the indenture or the debt securities without notice to or the consent of any holder for clarification, corrections, and legal compliance purposes, including as follows:

- to cure any ambiguity, defect or inconsistency;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to make any change that does not adversely affect the interests thereunder of any holder;
- to qualify the indenture under the Trust Indenture Act of 1939 as amended or to comply with the requirements of the SEC in order to maintain the qualification of the indenture under the Trust Indenture Act;
- to evidence the succession of another person to MoSys and that person's assumption of MoSys' covenants;
- to add to MoSys' covenants;
- to add any additional events of default;
- to secure the debt securities;

Table of Contents

- to establish the form or terms of debt securities;
- to evidence the appointment of a successor trustee under the indenture;
- to close the indenture with respect to authentication and delivery of additional series of debt securities; or
- to supplement the indenture in order to permit the defeasance and discharge of any series of debt securities.

The indenture will provide that MoSys and the trustee may make modifications and amendments to the indenture, and waive past defaults, with the consent of the holders of not less than a majority in aggregate principal amount at maturity of the outstanding debt securities in a series; provided, however, that no such modification or amendment may, without the consent of each holder affected thereby:

- change the stated maturity of the principal of, or any installment of interest on, any debt security;
- reduce the principal amount of, or premium, if any, or interest on, any debt security;
- reduce the amount of a debt security's principal that would be due and payable upon a declaration of acceleration, following a default;
- change the place of payment of, the currency of payment of principal of, or premium, if any, or interest on, any debt security;
- impair the right to institute suit for the enforcement of any payment on or after the stated maturity (or, in the case of a redemption, on or after the redemption date) of any debt security;
- adversely affect any right to convert or exchange any debt security that is convertible or exchangeable; or
- reduce the stated percentage of outstanding debt securities the consent of whose holders is necessary to modify, or amend the indenture or waive a past default.

Governing Law

Any issued debt securities and the indenture will be governed by the laws of the state of New York.

Concerning the Trustee

The indenture will provide that, except during the continuance of an event of default or default, the trustee will not be liable, except for the performance of such duties as are specifically set forth in such indenture. If an event of default has occurred and is continuing, the trustee 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 indenture and provisions of the Trust Indenture Act incorporated by reference in the indenture contain limitations on the rights of the trustee, should it become our creditor, 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, however, that if it acquires any conflicting interest, it must eliminate such conflict or resign.

Defeasance

The following provisions will be applicable to each series of debt securities unless we state in the applicable prospectus supplement that the provisions of covenant defeasance and full defeasance will not be applicable to that series.

The indenture will provide that we will be deemed to have paid and will be discharged from any and all obligations in respect of any issued series of debt securities and the provisions of the indenture, or will be released from our obligations to comply with covenants relating to those debt securities as described above or in the applicable prospectus supplement, (which may include obligations concerning subordination of our subordinated debt securities) upon satisfaction of applicable specified conditions such as:

- We have irrevocably deposited with the trustee, in trust, money and/or U.S. Government Obligations (as defined in the indenture) that through the payment of interest and principal in respect of those monies and/or U.S. Government Obligations in accordance with their terms, will provide money in an amount sufficient to pay the principal of, premium, if any, and interest, if any, on the series of debt securities on the stated maturity of such payments and any applicable sinking fund or analogous payments in accordance with the terms of the indenture and the debt securities;

Table of Contents

- Such defeasance shall not result in a breach, or constitute a default, under the indenture or any other material agreement of MoSys;
- We have delivered to the trustee either (i) an opinion of counsel to the effect that holders will not recognize additional income, gain or loss for U.S. federal income tax purposes as a result of MoSys' exercise of the defeasance or covenant defeasance, or (ii) a ruling directed to the trustee received from the Internal Revenue Service to the same effect as the aforementioned opinion of counsel;
- MoSys has delivered to the trustee an officer's certificate and an opinion of counsel, each stating that all the conditions precedent to full defeasance have been complied with.

In the event we exercise our option to omit compliance with certain covenants and provisions of the indenture with respect to a series of debt securities and the debt securities are declared due and payable because of the occurrence of an event of default that remains applicable, the amount of money and/or U.S. Government Obligations on deposit with the trustee will be sufficient to pay amounts due on the debt securities at the time of their stated maturity but may not be sufficient to pay amounts due on the debt securities at the time of the acceleration resulting from such event of default, however, we will remain liable for such payments.

We cannot defease our obligations to register the transfer or exchange of our debt securities; to replace our debt securities that have been stolen, lost or mutilated; to maintain paying agencies; or to hold fund for payment in trust. We may not defease our obligations if there is a continuing event of default on securities issued under the applicable indenture, or if depositing amounts into trust would cause the trustee to have conflicting interests with respect to other of our securities.

Resignation of Trustee

Each trustee may resign or be removed with respect to one or more series of indenture securities provided that a successor trustee is appointed to act with respect to these series. In the event that two or more persons are acting as trustee with respect to different series of indenture securities under one of the indentures, each of the trustees will be a trustee of a trust separate and apart from the trust administered by any other trustee.

Global Securities

We may issue debt securities as registered securities in book-entry form only. A global security represents one or any other number of individual debt securities. All debt securities represented by the same global security have the same terms.

Each debt security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement, The Depository Trust Company, New York, New York, known as DTC, will be the

depository for all debt securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depository or its nominee, unless special termination situations arise. As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all debt securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that has an account with the depository. Thus, an investor whose security is represented by a global security will not be a holder of the debt security, but only an indirect holder of a beneficial interest in the global security.

Table of Contents

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. The depositary that holds the global security will be considered the holder of the debt securities represented by the global security.

If debt securities are issued only in the form of a global security, an investor should be aware of the following:

- An investor cannot cause the debt securities to be registered in his or her name, and cannot obtain certificates for his or her interest in the debt securities, except in the special situations we describe below.
- An investor will be an indirect holder and must look to his or her own bank or broker for payments on the debt securities and protection of his or her legal rights relating to the debt securities.
- An investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the debt securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective.
- The depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security. We and the trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security. We and the trustee also do not supervise the depositary in any way.
- DTC requires that those who purchase and sell interests in a global security deposited in its book-entry system use immediately available funds. Your broker or bank may also require you to use immediately available funds when purchasing or selling interests in a global security.
- Financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the debt security. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Generally, a global security will be terminated and interests in it will be exchanged for certificates in non-global form, referred to as certificated securities only in the following instances:

- if the depositary notifies us and the trustee that it is unwilling or unable to continue as depositary for that global security;

- if the depositary ceases to be a clearing agency and we do not appoint another institution to act as depositary within 90 days;
- if we determine that we wish to terminate that global security; or
- if an event of default has occurred with regard to the debt securities represented by that global security and has not been cured or waived, and the owner of beneficial interests in the global security requests that certificated securities be delivered; we discuss defaults above under Events of Default.

The prospectus supplement may list situations for terminating a global security that would apply only to the particular series of debt securities covered by the prospectus supplement. If a global security is terminated, only the depositary, and not we or the applicable trustee, is responsible for deciding the names of the institutions in whose names the debt securities represented by the global security will be registered and, therefore, who will be the holders of those debt securities.

Payment and Paying Agent

Unless specified otherwise in a prospectus supplement, in the event certificated registered debt securities are issued, the holders of certificated registered debt securities will be able to receive payments of principal and of interest on their debt securities at the office of the paying agent. All payments of interest may be received at the offices of such paying agent upon presentation of certificated debt securities and all payments of principal may be received at such offices upon surrender of the debt securities. We also have the option of mailing checks or making wire transfers to the registered holders of the debt securities. Unless specified otherwise in a prospectus supplement, we will maintain a paying agent for the debt securities in the city of New York at all times that payments are to be made in respect of the debt securities and, if and so long as the debt securities remain outstanding.

Table of Contents

Description of Capital Stock

General

The following description of our capital stock and provisions of our certificate of incorporation and bylaws is a summary only and not a complete description.

Our authorized capital stock consists of 120,000,000 shares of common stock, par value \$0.01 per share, and 20,000,000 shares of preferred stock, par value \$0.01 per share.

Common Stock

As of October 29, 2010, 32,116,539 shares of our common stock were outstanding and held of record by 23 stockholders. Each holder of our common stock is entitled to

- one vote per share on all matters submitted to a vote of the stockholders;
- dividends as may be declared by our board of directors out of funds legally available for that purpose, subject to the rights of any preferred stock that may be outstanding; and
- his, her or its pro rata share in any distribution of our assets after payment or providing for the payment of liabilities and the liquidation preference of any outstanding preferred stock in the event of liquidation.

Holders of common stock have no cumulative voting rights, redemption rights or preemptive rights to purchase or subscribe for any shares of our common stock or other securities. All of the outstanding shares of common stock are fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future

Preferred Stock

Edgar Filing: MoSys, Inc. - Form 424B5

We have designated 120,000 shares of our preferred stock as Series AA preferred stock for issuance pursuant to the exercise of rights under our rights plan, none of which are outstanding. For more information on the rights plan, see the discussion below. We have no current intention to issue any other shares of preferred stock.

Our board of directors has the authority, subject to any limitations prescribed by Delaware law, to issue shares of preferred stock in one or more series and to fix and determine the relative rights and preferences of the shares constituting any series to be established, without any further vote or action by the stockholders. Any shares of our preferred stock so issued may have priority over our common stock with respect to dividend, liquidation and other rights.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Although the issuance of preferred stock could provide us with flexibility in connection with possible acquisitions and other corporate purposes, under some circumstances, it could have the effect of delaying, deferring or preventing a change of control.

Our board of directors may authorize the issuance of our preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Although the issuance of our preferred stock could provide us with flexibility in connection with possible acquisitions and other corporate purposes, under some circumstances, it could have the effect of delaying, deferring or preventing a change of control.

The prospectus supplement will specify as to each issuance of preferred stock:

- the maximum number of shares;
- the designation of the shares;
- annual dividend rate, if any, whether the dividend rate is fixed or variable, the date dividends will accrue, the dividend payment dates and whether dividends will be cumulative;
- the price and the terms and conditions for redemption, if any, including redemption at our option or at the option of the holders, including the time period for redemption, and any accumulated dividends or premiums;

Table of Contents

- the liquidation preference, if any, and any accumulated dividends upon the liquidation, dissolution or winding up of our affairs;
- any sinking fund or similar provision, and, if so, the terms and provisions relating to the purpose and operation of the fund;
- the terms and conditions, if any, for conversion or exchange of shares into or for any other class or classes of our capital stock or any series of any other class or classes, or into or for any other series of the same class, or any other securities or assets, including the price or the rate of conversion or exchange and the method, if any, of adjustment;
- the voting rights; and
- any or all other preferences and relative, participating, optional or other special rights, privileges or qualifications, limitations or restrictions.

Preferred stock will be fully paid and nonassessable upon issuance. The preferred stock or any series of preferred stock may be represented, in whole or in part, by one or more global certificates, which will represent an aggregate number of shares equal to that of the preferred stock represented by the global certificate.

Each global certificate will:

- be registered in the name of a depositary or a nominee of the depositary identified in the prospectus supplement;
- be deposited with such depositary or nominee or a custodian for the depositary; and
- bear a legend regarding any restrictions on exchanges and registration of transfer and any other matters as may be provided for under the certificate of designations.

Antitakeover Effects of Provisions of Our Certificate of Incorporation and Bylaws and of Delaware Law.

Edgar Filing: MoSys, Inc. - Form 424B5

Certain provisions of our charter documents and Delaware law could have an anti-takeover effect and could delay, discourage or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might otherwise result in a premium being paid over the market price of our common stock.

Certificate of Incorporation and Bylaws. Our certificate of incorporation provides that stockholders can take action only at a duly called annual or special meeting of the stockholders and not by written consent. At the same time, our bylaws will provide that special meetings of stockholders may be called only by our chairman of the board, our chief executive officer, any officer at the request in writing of a majority of the directors or by the holders of at least 25% of our outstanding shares. These provisions could delay consideration of a stockholder proposal until the next annual meeting.

Our bylaws provide for an advance notice procedure for the nomination, other than by or at the direction of our board of directors, of candidates for election as directors, as well as for other stockholder proposals to be considered at annual meetings of stockholders. In addition, under our bylaws newly created directorships resulting from any increase in the number of directors or any vacancies in the board resulting from death, resignation, retirement, disqualification, removal from office or other cause during a director's term in office can be filled by the vote of the remaining directors in office, and the board is expressly authorized to amend the bylaws without stockholder consent. These provisions may preclude a third party from removing incumbent directors and can control of our board of directors. Accordingly, these provisions could discourage a third party from initiating a proxy contest, making a tender offer or otherwise attempting to gain control of our company.

Delaware Takeover Statute. Section 203 of the Delaware General Corporation Law, or DGCL, generally prohibits a publicly-held Delaware corporation from engaging in an acquisition, asset sale or other transaction resulting in a financial benefit to any person who, together with affiliates and associates, owns, or within three years did own, 15% or more of a corporation's voting stock. The prohibition continues for a period of three years after the date of the transaction in which the person becomes an owner of 15% or more of the corporation's voting stock, unless the business combination is approved in a prescribed manner. The statute could prohibit, delay, defer or prevent a change in control with respect to our company.

Table of Contents

Transfer Agent

The transfer agent and registrar for our common stock is Wells Fargo Bank, National Association. We plan to retain the same transfer agent and registrar for any series of our preferred stock.

Description of Our Warrants

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and any related warrant agreements and warrant certificates. While the terms we have summarized below will apply generally to any warrants we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement, which may differ from the terms we describe below.

General

We may issue, together with other securities or separately, warrants to purchase our preferred stock, common stock or other securities. We may issue the warrants directly to the purchasers of the warrants or under warrant agreements to be entered into between us and a bank or trust company, as warrant agent, all as set forth in the applicable prospectus supplement. A warrant agent will act solely as our agent in connection with the warrants of the series being offered and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The prospectus supplement will describe the following terms, where applicable, of warrants that we may offer:

- the title of the warrants;

- the designation, amount and terms of the securities for which the warrants are exercisable and the procedures and conditions relating to the exercise of such warrants;

- the designation and terms of the other securities, if any, with which the warrants are to be issued and the number of warrants issued with each such security;

- the price or prices at which the warrants will be issued;

- the aggregate number of warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which the securities purchasable upon exercise of the warrants may be purchased, including provisions for adjustment of the exercise price of the warrant;
- if applicable, the date on and after which the warrants and the securities purchasable upon exercise of the warrants will be separately transferable;
- if applicable, a discussion of the material U.S. federal income tax considerations applicable to the exercise of the warrants;
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants;
- the date on which the right to exercise the warrants shall commence, and the date on which the right shall expire; and
- the maximum or minimum number of warrants which may be exercised at any time.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Table of Contents

Exercise of Warrants

Each warrant will entitle the holder thereof to purchase for cash the amount of debt securities or number of shares of preferred stock or common stock at the exercise price as will in each case be set forth in, or be determinable as set forth in, the applicable prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Warrants may be exercised as set forth in the applicable prospectus supplement relating to the warrants offered thereby. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, forward the purchased securities. If less than all of the warrants represented by the warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Enforceability of Rights of Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, that holder's warrants.

Plan of Distribution

We may sell the securities in and outside the United States through underwriters or dealers, directly to purchasers, including our affiliates, through agents, or through a combination of any of these methods. The prospectus supplement will include the following information:

- the terms of the offering;

- the names of any underwriters or agents;

- the name or names of any managing underwriter or underwriters;

- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any commissions paid to agents.

Sale Through Underwriters or Dealers

If underwriters are used in the sale of any of these securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in any prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

Table of Contents

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallocation and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell these securities for public offering and sale may make a market in those securities, but they will not be obligated to and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used in the sale of securities, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the prospectus supplement the names of the dealers and the terms of the transaction.

Direct Sales and Sales Through Agents

We may sell the securities directly, and not through underwriters or agents. We may also sell the securities through agents designated from time to time. In the prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the Securities Act), with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

Delayed Delivery Contracts

If we so indicate in the prospectus supplement, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities from us at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The prospectus supplement will describe the commission payable for solicitation of those contracts.

Issuance Of Common Stock Pursuant To Certain Warrant Exercises

We may also offer and sell our common stock upon the exercise of warrants issued by us, pursuant to the exemption from the registration requirements provided by Section 3(a)(10) of the Securities Act, in connection with a settlement of litigation against us. No underwriter would be used in connection with such offer and sale of common stock or the exercise of such warrants. We would issue the shares of our common stock directly to the holders of such warrants, upon the exercise of such warrants, from time to time. We will describe the terms of any such offers, sales and warrants in a prospectus supplement.

General Information

We may have agreements with the agents, dealers and underwriters to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the agents, dealers or underwriters may be required to make. Agents, dealers and underwriters may be customers of, engage in transactions with or perform services for us in the ordinary course of their businesses.

Table of Contents

Experts

The consolidated financial statements and related financial statement schedule of MoSys, Inc. as of December 31, 2009 and 2008 and for each of the three years in the period ended December 31, 2009, incorporated in this Registration Statement on Form S-3 by reference to MoSys, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009, have been so incorporated in reliance on the report of Burr Pilger Mayer, Inc., an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Legal Matters

The validity of the issuance of shares of common stock offered hereby will be passed upon for us by Bingham McCutchen LLP, East Palo Alto, California.

Where You Can Find More Information

We file annual, quarterly and special reports and other information with the SEC. In addition, we have filed with the SEC a Registration Statement on Form S-3, of which this prospectus is a part, under the Securities Act, with respect to the shares of common stock offered hereby. You may read and obtain copies at prescribed rates of any document that we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. Our SEC filings are also available to you free of charge at the SEC's web site at <http://www.sec.gov>, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Our common stock is traded on the Global Market of the NASDAQ Stock Market. Material filed by us can be inspected at the offices of the Financial Industry Regulatory Authority, 1735 K Street, N.W., Washington, D.C. 20006.

Incorporation by Reference

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below:

- (a) the section entitled "Description of Capital Stock" in the Prospectus contained in Amendment No. 7 to the Registration Statement on Form S-1 we filed with the SEC on June 26, 2001 (Registration No. 333-43122);

Edgar Filing: MoSys, Inc. - Form 424B5

- (b) our Annual Report on Form 10-K and Form 10-K/A for the fiscal year ended December 31, 2009, filed with the SEC on March 26, 2010 and April 30, 2010, respectively;
- (c) our Quarterly Report on Form 10-Q for the three months ended March 31, 2010, filed with the SEC on May 12, 2010;
- (d) our Quarterly Report on Form 10-Q for the three months ended June 30, 2010, filed with the SEC on August 13, 2010;
- (e) our Quarterly Report on Form 10-Q for the three months ended September 30, 2010, filed with the SEC on November 3, 2010;
- (f) our definitive proxy statement on Schedule 14A filed with the SEC on May 26, 2010;
- (g) our Current Report on Form 8-K filed with the SEC on July 6, 2010; and
- (h) our Current Report on Form 8-K filed with the SEC on July 22, 2010.

In addition, all documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of filing the registration statement that includes this prospectus and prior to the filing of a post-effective amendment to the registration statement containing this prospectus, which indicates that all securities offered have been sold or which deregisters all of such securities then remaining unsold, shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the respective dates of filing of such documents.

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

MoSys, Inc.

3301 Olcott Street

Santa Clara, CA 95054

(408) 418-7500

Attention: Chief Financial Officer

Edgar Filing: MoSys, Inc. - Form 424B5

In addition, you may obtain a copy of these filings from the SEC as described above in the section entitled [Where You Can Find More Information](#).