

ILLUMINA INC
Form S-3ASR
July 30, 2007

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As filed with the Securities and Exchange Commission on July 30, 2007

Registration No. 333-

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

**FORM S-3
REGISTRATION STATEMENT
Under
*THE SECURITIES ACT OF 1933***

Illumina, Inc.
(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

33-0804655
(I.R.S. Employer
Identification No.)

**9885 Towne Centre Drive
San Diego, California 92121
(858) 202-4500**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Jay T. Flatley
President and Chief Executive Officer
Illumina, Inc.
9885 Towne Centre Drive
San Diego, California 92121
(858) 202-4500**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

**Copies to:
Frederick W. Kanner
Dewey Ballantine LLP
1301 Avenue of the Americas
New York, NY 10019
(212) 259-8000**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box:

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box:

Calculation of Registration Fee

Title of each class of securities to be registered	Amount to be registered	Proposed maximum offering price per unit	Proposed maximum aggregate offering price	Amount of registration fee
Common stock, par value \$0.01 per share, including related rights to purchase Series A Junior Participating Preferred Stock ⁽¹⁾	2,244,843 ⁽²⁾	42.58 ⁽³⁾	95,585,415 ⁽³⁾	\$2,934 ⁽⁴⁾

(1) Each share of the registrant's common stock being registered hereunder, if issued before the termination of the registrant's preferred share rights agreement, includes Series A Junior Participating Preferred Stock purchase rights. Before the occurrence of certain events, the Series A Junior Participating Preferred Stock purchase rights will not be exercisable or evidenced

separately from the registrant's common stock and have no value except as reflected in the market price of the shares to which they are attached.

- (2) Represents shares that are issuable, or have been issued, upon the exercise of warrants for the registrant's common stock. Pursuant to Rule 416 under the Securities Act of 1933, the number of shares of common stock registered hereby includes an indeterminate number of shares of common stock that may be issued in connection with stock splits, stock dividends or similar transactions.
- (3) Estimated pursuant to Rule 457(c) under the Securities Act of 1933 solely for purposes of calculating the amount of registration fee, based on the

average of the high and low prices as reported on the NASDAQ Global Market on July 24, 2007.

- (4) A filing fee of \$2,934.00 has been transmitted to the SEC in connection with the securities offered pursuant to this registration statement.
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PROSPECTUS

**2,244,843 Shares
Common Stock**

The selling stockholders identified in this prospectus or any supplement to this prospectus may, from time to time, offer and sell up to 2,244,843 shares of our common stock that are issuable, or that have been issued, upon the exercise of warrants to purchase our common stock. These warrants were originally issued by, and exercisable for shares of the common stock of, Solexa, Inc. In January 2007, we acquired Solexa and assumed these warrants, which then became warrants for shares of our common stock.

We are not selling any of the shares of common stock covered by this prospectus, and we will not receive any proceeds from the sale of shares by the selling stockholders.

Our common stock is quoted on the NASDAQ Global Market under the symbol ILMN. On July 27, 2007 the last reported sales price per share of our common stock on the NASDAQ Global Market was \$46.70.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should read the discussion of material risks of investing in our common stock under the caption Risk Factors, beginning on page 2.

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 or any supplement to this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 30, 2007.

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You should rely only on the information contained in or incorporated by reference into this prospectus and any applicable prospectus supplement, and the information contained in any permitted free writing prospectuses we have authorized for use with respect to this prospectus. We have not authorized anyone to provide you with different or additional information. This document may only be used where it is legal to sell our common stock. You should not assume that the information contained in this prospectus, any related prospectus supplement, any related permitted free writing prospectus we have authorized or any document incorporated by reference into this prospectus or any applicable prospectus supplement is accurate as of any date other than its date, regardless of when you receive those documents or when any particular sale of our common stock occurs.

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, or SEC. We have identified in this prospectus all of the selling stockholders currently known by us to own the warrants or underlying shares that are described in this prospectus. From time to time, we may file with the SEC supplements to this prospectus identifying additional selling stockholders who may become known to us after the date of this prospectus.

This prospectus and the information incorporated by reference into this prospectus include trademarks, service marks and trade names owned by us or others. All trademarks, service marks and trade names included or incorporated by reference in this prospectus are the property of their respective owners.

Unless the context requires otherwise, the words Illumina, we, company, us and our refer to Illumina, Inc. and its subsidiaries, and the term you refers to a prospective investor.

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Prospectus summary

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus and may not contain all of the information that is important to you. This prospectus includes information about the shares the selling stockholders identified in this prospectus are offering as well as information regarding our business and detailed financial data. You should read this prospectus in its entirety, including the information incorporated by reference in this prospectus.

BUSINESS OVERVIEW

We are a leading developer, manufacturer and marketer of next-generation life science tools and integrated systems for the large scale analysis of genetic variation and biological function. Using our proprietary technologies, we provide a comprehensive line of products and services that currently serve the sequencing, genotyping and gene expression markets, and we expect to enter the market for molecular diagnostics. Our customers include leading genomic research centers, pharmaceutical companies, academic institutions, clinical research organizations and biotechnology companies. Our tools provide researchers around the world with the performance, throughput, cost effectiveness and flexibility necessary to perform the billions of genetic tests needed to extract valuable medical information from advances in genomics and proteomics. We believe this information will enable researchers to correlate genetic variation and biological function, which will enhance drug discovery and clinical research, allow diseases to be detected earlier and permit better choices of drugs for individual patients.

Recent Developments

On January 26, 2007, we completed the acquisition of Solexa, Inc. for approximately 13.1 million shares of our common stock. Solexa develops and commercializes genetic analysis technologies used to perform a range of analyses, including whole genome resequencing, gene expression analysis and small RNA analysis. We believe our combined company is the only company with genome-scale technology for genotyping, gene expression and sequencing, the three cornerstones of modern genetic analysis.

OUR CORPORATE INFORMATION

We were incorporated in California in April 1998 and reincorporated in Delaware in July 2000. Our principal executive offices are located at 9885 Towne Centre Drive, San Diego, California 92121, and our telephone number is (858) 202-4500. We maintain an Internet website at www.illumina.com. We have not incorporated by reference into this prospectus the information in, or that can be accessed through, our website, and you should not consider it to be a part of this prospectus.

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Risk Factors

Investing in our common stock involves a high degree of risk. In addition to the other information included or incorporated by reference in this prospectus or accompanying prospectus supplement or in any free writing prospectus we have authorized, you should carefully consider the risks described below before purchasing our common stock. If any of the following risks actually occurs, our business, results of operations and financial condition will likely suffer. As a result, the trading price of our common stock may decline, and you might lose part or all of your investment.

RISKS RELATED TO OUR BUSINESS

Litigation or other proceedings or third party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or services or impact our stock price.

Our commercial success depends in part on our non-infringement of the patents or proprietary rights of third parties and on our ability to protect our own intellectual property. As we have previously disclosed, in July 2004, Affymetrix, Inc. filed a complaint against us in federal court in Wilmington, Delaware, alleging infringement of six of its patents. In preliminary proceeding, the court dismissed a patent Affymetrix had sought to withdraw from its suit leaving five patents being asserted against us. A March 5, 2007 infringement trial led to a jury finding of infringement of these five patents. That finding was made without consideration of the validity and enforceability of these patents. The jury also ordered us to pay damages based on a royalty of 15% for certain products that we launched and sold before the end of 2005. The total amount of damages awarded by the jury was \$16.7 million. Although we believe the subsequent trials will confirm the invalidity and unenforceability positions we have taken with respect to these Affymetrix patents, we cannot assure you that the patents will be found invalid or unenforceable. In addition, patents enjoy a presumption of validity that can be rebutted only by clear and convincing evidence. Any adverse ruling or perception of an adverse ruling throughout these proceedings will likely have a material adverse impact on our stock price, which may be disproportionate to the actual import of the ruling itself.

Third parties, including Affymetrix, have asserted or may assert that we are employing their proprietary technology without authorization. As we enter new markets, we expect that competitors will likely assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. In addition, third parties may have obtained and may in the future obtain patents allowing them to claim that the use of our technologies infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against any of these claims. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to develop further, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may also not be able to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our ability to grow and maintain profitability.

We expect intense competition in our target markets, which could render our products obsolete, result in significant price reductions or substantially limit the volume of products that we sell. This would limit our ability to compete and maintain profitability. If we cannot continuously develop and commercialize new products, our revenue may not grow as intended.

We compete with life sciences companies that design, manufacture and market instruments for analysis of genetic variation and biological function and other applications using technologies such as two-dimensional electrophoresis, capillary electrophoresis, mass spectrometry, flow cytometry, microfluidics, nanotechnology, next-generation DNA sequencing and mechanically deposited, inkjet and photolithographic arrays. We anticipate that we

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will face increased competition in the future as existing companies develop new or improved products and as new companies enter the market with new technologies. The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition, new product introductions and strong price competition. For example, prices per data point for genotyping have fallen significantly over the last two years and we anticipate that prices will continue to fall. One or more of our competitors may render our technology obsolete or uneconomical. Some of our competitors have greater financial and personnel resources, broader product lines, a more established customer base and more experience in research and development than we do. Furthermore, life sciences and pharmaceutical companies, which are our potential customers and strategic partners, could develop competing products. If we are unable to develop enhancements to our technology and rapidly deploy new product offerings, our business, financial condition and results of operations will suffer.

We may encounter difficulties in integrating acquisitions that could adversely affect our business.

We acquired Solexa, Inc. (Solexa) in January 2007 and CyVera Corporation in April 2005 and we may in the future acquire technology, products or businesses related to our current or future business. We have limited experience in acquisition activities and may have to devote substantial time and resources in order to complete acquisitions. Further, these potential acquisitions entail risks, uncertainties and potential disruptions to our business. For example, we may not be able to successfully integrate a company's operations, technologies, products and services, information systems and personnel into our business. An acquisition may further strain our existing financial and managerial resources, and divert management's attention away from our other business concerns. In connection with these acquisitions, we assumed certain liabilities and hired certain employees, which is expected to continue to result in an increase in our research and development expenses and capital expenditures. There may also be unanticipated costs and liabilities associated with an acquisition that could adversely affect our operating results. To finance any acquisitions, we may choose to issue shares of our common stock as consideration, which would result in dilution to our stockholders. Additionally, an acquisition may have a substantial negative impact on near-term expected financial results.

The success of the Solexa merger will depend, in part, on our ability to realize the anticipated synergies, growth opportunities and cost savings from integrating Solexa's businesses with our businesses. Our success in realizing these benefits and the timing of this realization depend upon the successful integration of the operations of Solexa. The integration of two independent companies is a complex, costly and time-consuming process. The difficulties of combining the operations of the companies include, among other factors:

- lost sales and customers as a result of certain customers of either of the two companies deciding not to do business with the combined company;

- complexities associated with managing the combined businesses;

- integrating personnel from diverse corporate cultures while maintaining focus on providing consistent, high quality products and customer service;

- coordinating geographically separated organizations, systems and facilities;

- potential unknown liabilities and unforeseen increased expenses or delays associated with the merger; and

- performance shortfalls at one or both of the companies as a result of the diversion of management's attention to the merger.

If we are unable to successfully combine the businesses in a manner that permits the combined company to achieve the cost savings and operating synergies anticipated to result from the merger, such anticipated benefits of the merger may not be realized fully or at all or may take longer to realize than expected. In addition, we and Solexa have operated and will continue to operate independently. It is possible that the integration process could result in the loss of key employees, diversion of each company's management's attention, the disruption or interruption of, or the loss of momentum in, each company's ongoing businesses or inconsistencies in standards, controls, procedures and policies,

any of which could adversely affect our ability to maintain relationships with customers and employees

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or our ability to achieve the anticipated benefits of the merger, or could reduce our earnings or otherwise adversely affect the business and financial results of the combined company.

The combined company may fail to realize the anticipated benefits of the merger as a result of our failure to achieve anticipated revenue growth following the merger.

For various reasons, including significant competition, low market acceptance or market growth, and lack of technology advantage, revenue recognized from the Solexa acquisition may not grow as anticipated and if so, we may not realize the expected value from this transaction.

Our manufacturing capacity may limit our ability to sell our products.

We continue to ramp up our capacity to meet the anticipated demand for our products. Although we have significantly increased our manufacturing capacity and we believe that we have sufficient plans in place to ensure we have adequate capacity to meet our business plan in 2007 and 2008, there are uncertainties inherent in expanding our manufacturing capabilities and we may not be able to increase our capacity in a timely manner. For example, manufacturing and product quality issues may arise as we increase production rates at our manufacturing facility and launch new products. As a result, we may experience difficulties in meeting customer, collaborator and internal demand, in which case we could lose customers or be required to delay new product introductions, and demand for our products could decline. Additionally, in the past, we have experienced variations in manufacturing conditions that have temporarily reduced production yields. Due to the intricate nature of manufacturing products that contain DNA, we may encounter similar or previously unknown manufacturing difficulties in the future that could significantly reduce production yields, impact our ability to launch or sell these products, or to produce them economically, prevent us from achieving expected performance levels or cause us to set prices that hinder wide adoption by customers.

If we are unable to find third-party manufacturers to manufacture components of our products, we may not be able to launch or support our products in a timely manner, or at all.

The nature of our products requires customized components that currently are available from a limited number of sources. For example, we currently use multiple components in our products that are single-sourced. If we are unable to secure a sufficient supply of those or other product components, we will be unable to meet demand for our products. We may need to enter into contractual relationships with manufacturers for commercial-scale production of some of our products, or develop these capabilities internally, and we cannot assure you that we will be able to do this on a timely basis, for sufficient quantities or on commercially reasonable terms. Accordingly, we may not be able to establish or maintain reliable, high-volume manufacturing at commercially reasonable costs.

Our sales, marketing and technical support organization may limit our ability to sell our products.

We currently have fewer resources available for sales and marketing and technical support services compared to some of our primary competitors. In order to effectively commercialize our sequencing, genotyping and gene expression systems and other products to follow, we will need to expand our sales, marketing and technical support staff both domestically and internationally. We may not be successful in establishing or maintaining either a direct sales force or distribution arrangements to market our products and services. In addition, we compete primarily with much larger companies that have larger sales and distribution staffs and a significant installed base of products in place, and the efforts from a limited sales and marketing force may not be sufficient to build the market acceptance of our products required to support continued growth of our business.

The merger will cause dilution of our earnings per share.

The merger and the transactions contemplated by the merger agreement are expected to have a dilutive effect on our earnings per share at least through 2007 due to losses of Solexa, the additional shares of our common stock that were issued in the merger, the transaction and integration-related costs and other factors such as the potential failure to realize any benefit from synergies anticipated in the merger. These factors could adversely affect the market price of our common stock.

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Solexa had a material weakness in its internal controls over financial reporting as of December 31, 2005. If additional material weaknesses are identified in the future, current and potential stockholders could lose confidence in our consolidated financial reporting, which could harm our business and the trading of our common stock.

As of December 31, 2005, Solexa did not maintain effective control over the application of GAAP related to the financial reporting process. This control deficiency resulted in numerous adjustments being required to bring Solexa's financial statements into compliance with GAAP. Additionally, this deficiency could have resulted in material misstatement of the annual or interim consolidated financial statements that would not be prevented or detected. Accordingly, Solexa's management determined that this control deficiency constituted a material weakness. Because of this material weakness, Solexa's management concluded that, as of December 31, 2005, it did not maintain effective internal control over financial reporting based on those criteria. Should we, or our independent registered public accounting firm, determine in future fiscal periods that there are material weaknesses in our consolidated internal controls over financial reporting (including Solexa), the reliability of our financial reports may be impacted, and our results of operations or financial condition may be harmed and the price of our common stock may decline.

Any inability to adequately protect our proprietary technologies could harm our competitive position.

Our success will depend in part on our ability to obtain patents and maintain adequate protection of our intellectual property in the United States and other countries. If we do not protect our intellectual property adequately, competitors may be able to use our technologies and thereby erode our competitive advantage. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant challenges in protecting their proprietary rights abroad. These challenges can be caused by the absence of rules and methods for the establishment and enforcement of intellectual property rights abroad.

The patent positions of companies developing tools for the life sciences and pharmaceutical industries, including our patent position, generally are uncertain and involve complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We intend to apply for patents covering our technologies and products, as we deem appropriate. However, our patent applications may be challenged and may not result in issued patents or may be invalidated or narrowed in scope after they are issued. Questions as to inventorship may also arise. For example, in June 2005, a former employee filed a complaint against us, claiming he is entitled to be named as joint inventor of certain of our U.S. patents and pending U.S. and foreign patent applications, and seeking a judgment that the related patents and applications are unenforceable. Any finding that our patents and applications are unenforceable could harm our ability to prevent others from practicing the related technology, and a finding that others have inventorship rights to our patents and applications could require us to obtain certain rights to practice related technologies, which may not be available on favorable terms, if at all.

In addition, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. There also is risk that others may independently develop similar or alternative technologies or design around our patented technologies. Also, our patents may fail to provide us with any competitive advantage. We may need to initiate additional lawsuits to protect or enforce our patents, or litigate against third party claims, which would be expensive and, if we lose, may cause us to lose some of our intellectual property rights and reduce our ability to compete in the marketplace. Furthermore, these lawsuits may divert the attention of our management and technical personnel.

We also rely upon trade secret protection for our confidential and proprietary information. We have taken security measures to protect our confidential information. These measures, however, may not provide adequate protection for our trade secrets or other confidential information. Among other things, we seek to protect our trade secrets and confidential information by entering into confidentiality agreements with employees, collaborators and consultants. Nevertheless, employees, collaborators or consultants may still disclose our confidential information, and we may not otherwise be able to effectively protect our trade secrets. Accordingly, others may gain access to our confidential information, or may independently develop substantially equivalent information or techniques.

Table of Contents**If we are unable to develop and maintain operation of our manufacturing capability, we may not be able to launch or support our products in a timely manner, or at all.**

We currently possess limited facilities capable of manufacturing our principal products and services for both sale to our customers and internal use. If a natural disaster were to significantly damage one of our facilities or if other events were to cause our operations to fail, these events could prevent us from developing and manufacturing our products and services. Also, many of our manufacturing processes are automated and are controlled by our custom-designed Laboratory Information Management System (LIMS). Additionally, as part of the decoding step in our array manufacturing process, we record several images of each array to identify what bead is in each location on the array and to validate each bead in the array. This requires significant network and storage infrastructure. If either our LIMS system or our networks or storage infrastructure were to fail for an extended period of time, it would adversely impact our ability to manufacture our products on a timely basis and may prevent us from achieving our expected shipments in any given period.

We have a significant amount of indebtedness. We may not be able to make payments on our indebtedness, and we may incur additional indebtedness in the future, which could adversely affect our operation and profitability.

In February 2007, we issued \$400 million of 0.625% convertible senior notes due February 2014. The notes bear interest semi-annually, mature on February 15, 2014 and obligate us to repurchase the notes at the option of the holders if a designated event (as defined in the indenture for the notes), such as certain merger transactions involving us, occurs. In addition, upon conversion of the notes, we must pay in cash the principal portion of the notes being converted. Our ability to make payments on the notes will depend on our future operating performance and our ability to generate cash and may also depend on our ability to obtain additional debt or equity financing. We may need to use our cash to pay principal and interest on our debt, which will reduce the funds available to fund our research and development programs, strategic initiatives and working capital requirements. Our ability to generate sufficient operating cash flow to service the notes and fund our operating requirements will depend on our continued ability to commercialize new products and expand our manufacturing capabilities. Our debt service obligations increase our vulnerabilities to competitive pressures, because our competitors may be less leveraged than us. If we are unable to generate sufficient operating cash flow to service our indebtedness and fund our operating requirements, we may be forced to reduce our development programs or seek additional debt or equity financing, which may not be available to us on satisfactory terms, or at all, or may dilute the interests of our existing stockholders. Our level of indebtedness may make us more vulnerable to economic or industry downturns. If we incur new indebtedness, the risks relating to our business and our ability to service our indebtedness will intensify.

We expect that our results of operations will fluctuate. This fluctuation could cause our stock price to decline.

Our revenue is subject to fluctuations due to the timing of sales of high-value products and services projects, the impact of seasonal spending patterns, the timing and size of research projects our customers perform, changes in overall spending levels in the life sciences industry, and other unpredictable factors that may affect customer ordering patterns. Given the difficulty in predicting the timing and magnitude of sales for our products and services, we may experience quarter-to-quarter fluctuations in revenue resulting in the potential for a sequential decline in quarterly revenue. A large portion of our expenses are relatively fixed, including expenses for facilities, equipment and personnel. In addition, we expect operating expenses to continue to increase significantly in absolute dollars. Accordingly, if revenue does not grow as anticipated, we may not be able to maintain annual profitability. Any significant delays in the commercial launch of our products, unfavorable sales trends in our existing product lines, or impacts from the other factors mentioned above, could adversely affect our future revenue growth or cause a sequential decline in quarterly revenue. Due to the possibility of fluctuations in our revenue and expenses, we believe that quarterly comparisons of our operating results are not a good indication of our future performance. If our operating results fluctuate or do not meet the expectations of stock market analysts and investors, our stock price could decline.

We have only recently achieved annual operating profitability.

Prior to 2006, we had incurred net losses each year since our inception. As of July 1, 2007, our accumulated

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deficit was \$393.4 million. Our ability to sustain annual profitability will depend, in part, on the rate of growth, if any, of our revenue and on the level of our expenses. Non-cash stock-based compensation expense and expenses related to our acquisition of Solexa in January 2007 are also likely to adversely affect our future profitability. We expect to continue incurring significant expenses related to research and development, sales and marketing efforts to commercialize our products and the continued development of our manufacturing capabilities. In addition, we expect that our research and development and selling and marketing expenses will increase at a higher rate in the future as a result of the development and launch of new products. Even if we maintain profitability, we may not be able to increase profitability on a quarterly basis.

We may encounter difficulties in managing our growth. These difficulties could impair our profitability.

We have experienced and expect to continue to experience rapid and substantial growth in order to achieve our operating plans, which will place a strain on our human and capital resources. If we are unable to manage this growth effectively, our profitability could suffer. Our ability to manage our operations and growth effectively requires us to continue to expend funds to enhance our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. If we are unable to scale up and implement improvements to our manufacturing process and control systems in an efficient or timely manner, or if we encounter deficiencies in existing systems and controls, then we will not be able to make available the products required to successfully commercialize our technology. Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

Changes in our effective income tax rate could impact our profitability.

We are subject to income taxes in both the United States and numerous foreign jurisdictions. Significant judgments based on interpretations of existing tax laws or regulations are required in determining the provision for income taxes. Our effective income tax rate could be adversely affected by various factors including, but not limited to, changes in the mix of earnings in tax jurisdictions with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in existing tax laws or tax rates, changes in the level of non-deductible expenses including stock-based compensation, changes in our future levels of research and development spending, mergers and acquisitions, and the result of examinations by various tax authorities.

If we lose our key personnel or are unable to attract and retain additional personnel, we may be unable to achieve our goals.

We are highly dependent on our management and scientific personnel, including Jay Flatley, our president and chief executive officer; John Stuelpnagel, our senior vice president, general manager of microarrays and chief operating officer; and John West, our senior vice president and general manager of sequencing. The loss of their services could adversely impact our ability to achieve our business objectives. We will need to hire additional qualified personnel with expertise in molecular biology, chemistry, biological information processing, sales, marketing and technical support. We compete for qualified management and scientific personnel with other life science companies, universities and research institutions, particularly those focusing on genomics. Competition for these individuals, particularly in the San Diego and San Francisco area, is intense, and the turnover rate can be high. Failure to attract and retain management and scientific personnel would prevent us from pursuing collaborations or developing our products or technologies.

Our planned activities will require additional expertise in specific industries and areas applicable to the products developed through our technologies, including the life sciences and healthcare industries. Thus, we will need to add new personnel, including management, and develop the expertise of existing management. The failure to do so could impair the growth of our business.

A significant portion of our sales are to international customers.

Approximately 31% and 43% of our revenue for the three months ended July 1, 2007 and July 2, 2006, respectively, was derived from shipments to customers outside the United States. Approximately 35% and 44% of our revenue for the six months ended July 1, 2007 and July 2, 2006, respectively, was derived from shipments to customers outside the United States. We intend to continue to expand our international presence and export sales to

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international customers and we expect the total amount of non-U.S. sales to continue to grow. Export sales entail a variety of risks, including:

currency exchange fluctuations;

unexpected changes in legislative or regulatory requirements of foreign countries into which we import our products;

difficulties in obtaining export licenses or in overcoming other trade barriers and restrictions resulting in delivery delays; and

significant taxes or other burdens of complying with a variety of foreign laws.

In addition, sales to international customers typically result in longer payment cycles and greater difficulty in accounts receivable collection. We are also subject to general geopolitical risks, such as political, social and economic instability and changes in diplomatic and trade relations. One or more of these factors could have a material adverse effect on our business, financial condition and operating results.

Our success depends upon the continued emergence and growth of markets for analysis of genetic variation and biological function.

We design our products primarily for applications in the life sciences and pharmaceutical industries. The usefulness of our technology depends in part upon the availability of genetic data and its usefulness in identifying or treating disease. We are focusing on markets for analysis of genetic variation and biological function, namely sequencing, SNP genotyping and gene expression profiling. These markets are new and emerging, and they may not develop as quickly as we anticipate, or reach their full potential. Other methods of analysis of genetic variation and biological function may emerge and displace the methods we are developing. Also, researchers may not seek or be able to convert raw genetic data into medically valuable information through the analysis of genetic variation and biological function. In addition, factors affecting research and development spending generally, such as changes in the regulatory environment affecting life sciences and pharmaceutical companies, and changes in government programs that provide funding to companies and research institutions, could harm our business. If useful genetic data is not available or if our target markets do not develop in a timely manner, demand for our products may grow at a slower rate than we expect, and we may not be able to sustain annual profitability.

RISKS RELATED TO OWNING OUR COMMON STOCK

Our poison pill, provisions of our charter documents and Delaware General Corporation Law may deter or prevent a business combination that may be favorable to you.

Provisions of our charter documents could prevent or deter a third party from acquiring us, even if doing so would be beneficial to our stockholders. These provisions include:

establishing a classified board of directors, so that only a portion of our total board can be elected at each annual meeting;

setting limitations on the removal of our directors;

granting our board of directors the authority to issue blank check preferred stock without stockholder approval;

prohibiting cumulative voting in the election of our directors, which would otherwise permit less than a majority of stockholders to elect directors;

setting limitations on our stockholders' ability to call special meetings; and

prohibiting stockholder action by written consent.

We have also established a rights agreement, also called a poison pill. Generally, our rights plan permits our existing stockholders to purchase a large number of our shares at a substantial discount to the market price if a third party

attempts to gain control of a sufficient equity position in us. Our rights agreement could have the effect of

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preventing or deterring a third party from acquiring us in a transaction that might be favorable to you. In addition, Section 203 of the Delaware General Corporation Law generally prohibits us from engaging in any business combination with certain persons who own 15% or more of our outstanding voting stock or any of our associates or affiliates who at any time in the past three years have owned 15% or more of our outstanding voting stock. These provisions could adversely affect the price that investors are willing to pay for shares of our common stock and prevent you from realizing a premium that stockholders may receive in connection with a corporate takeover.

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

We have not declared or paid any cash dividends on our common stock or other securities, and we currently do not anticipate paying any cash dividends in the foreseeable future. Accordingly, our stockholders will not realize a return on their investment unless the trading price of our common stock appreciates. Our common stock may not appreciate in value or even maintain the price at which you purchased your shares.

Market volatility may affect our stock price, and the value of your investment in our common stock may experience sudden decreases.

There has been, and will likely continue to be, significant volatility in the market price of securities of biotechnology companies, including us. These fluctuations can be unrelated to the operating performance of these companies. During the period from January 1, 2005 to July 27, 2007, the lowest and highest reported trading prices of our common stock on the NASDAQ Global Market were \$6.72 and \$48.00, respectively. Factors such as the following could cause the market price of our common stock to fluctuate substantially:

announcements of new products or services by us or our competitors;

litigation involving or affecting us;

quarterly fluctuations in our financial results or other companies' financial results;

shortfalls in our actual financial results compared to our guidance or the forecasts of stock market analysts;

acquisitions or strategic alliances by us or our competitors;

the gain or loss of a significant customer; and

general conditions in our industry and conditions in the financial markets.

A decline in the market price of our common stock could cause you to lose some or all of your investment and may adversely impact our ability to attract and retain employees, acquire other companies or businesses and raise capital. In addition, stockholders may initiate securities class action lawsuits if the market price of our common stock drops significantly, which may cause us to incur substantial costs and could divert the time and attention of our management.

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Use of Proceeds

We will not receive any proceeds from the sale of common stock by the selling stockholders pursuant to this prospectus.

Upon any cash exercise of the warrants covering the shares offered by this prospectus, we will receive a cash amount equal to the exercise price of the warrants. The warrants currently have exercise prices ranging from \$14.54 to \$78.96 per share. However, warrant holders may in certain circumstances exercise their warrants on a cashless basis, in which case we will not receive any cash upon exercise.

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Plan of Distribution

We are registering the offer and sale of shares of our common stock by the selling stockholders named under the caption Selling Stockholders. We will pay all of the costs, expenses and fees in connection with the registration of the shares covered by this prospectus, except that the selling stockholders will be responsible for any brokerage commissions or similar selling expenses attributable to the sale of shares.

The selling stockholders may, from time to time, sell any or all of their shares of common stock in private transactions or on any stock exchange (including the NASDAQ Global Market), automated interdealer quotation system, over-the-counter market or trading facility on which the shares are traded. These dispositions may be at fixed prices that may change, at market prices prevailing at the time of sale, at prices related to prevailing market prices, at varying prices determined at the time of sale or at prices otherwise negotiated. The selling stockholders may use any one or more of the following methods when selling shares:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which a broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales (including short sales against the box);

through the writing or settlement of options or other hedging or derivative transactions, whether through an options exchange or otherwise;

through the distribution of the common stock by any selling stockholder to its partners, members or stockholders;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any of the above methods of sale; and

any other method permitted by applicable law.

The selling stockholders may effect these transactions by selling shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholders and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal, or both. This compensation to any particular broker-dealer might be in excess of customary commissions and might constitute underwriting compensation. The selling stockholders and any broker-dealers that act in connection with the sale of shares might be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act of 1933, and any commissions received by these broker-dealers and any profit on the resale of the shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act. We have agreed to indemnify certain of the selling stockholders against certain liabilities, including liabilities arising under the Securities Act. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against certain liabilities, including liabilities arising under the Securities Act.

Because selling stockholders may be deemed to be underwriters within the meaning of Section 2(a)(11) of the Securities Act, the selling stockholders will be subject to the prospectus delivery requirements of the Securities Act. We have informed the selling stockholders that the anti-manipulative provisions of Regulation M under the Securities Exchange Act of 1934 may apply to their sales in the market.

From time to time, the selling stockholders may pledge or donate or pledge their shares to others. The pledgees or donees will be deemed to be a selling stockholder for purposes of this prospectus. If a selling stockholder notifies us that a pledgee or donee intends to sell more than 500 shares, we intend to file a supplement to this prospectus to the extent required by law.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon

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Rule 144 under the Securities Act, if they meet the criteria and conform to the requirements of that rule. If required, we intend to file a supplement to this prospectus if a selling stockholder notifies us that any arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer.

Table of Contents**Selling Stockholders**

On January 26, 2007, we acquired Solexa, Inc. for approximately 13.1 million shares of our common stock. On various dates before this acquisition, Solexa issued warrants for shares of Solexa's common stock to various investors and entered into agreements with these investors obligating Solexa to register, under the Securities Act of 1933, the offer and sale of the shares issuable upon the exercise of these warrants. When we acquired Solexa, we assumed Solexa's obligation to register the offer and sale of these shares, and the warrants became warrants for shares of our common stock. These agreements generally obligate us to keep the registration statement of which this prospectus is a part effective until the fifth anniversary of such agreements.

The following table presents information regarding the selling stockholders and the shares that they may offer and sell from time to time under this prospectus. We prepared this table based on information that the selling stockholders listed below have supplied to us. The information about the selling stockholders listed below may change over time, and we may not be made aware of these changes. If the selling stockholders notify us of any such change, we will reflect the change in a prospectus supplement to this prospectus.

The term "selling stockholders" includes the stockholders listed below and certain of their pledgees and donees, or other successors, described under "Plan of Distribution." The number of shares in the column "Maximum Number of Shares of Common Stock Being Sold in this Offering" represents all of the shares that the applicable selling stockholder may offer under this prospectus and assumes the selling stockholder exercises, for cash, of all the warrants it holds. The selling stockholders may sell some, all or none of their shares. We do not know how long the selling stockholders will hold the shares before selling them, if at all.

The selling stockholders may be deemed to be "underwriters" for purposes of the Securities Act, and any profits they realize by selling shares may be deemed to be underwriting compensation.

Beneficial ownership and percentage ownership are determined in accordance with the SEC's rules. The percentages in the table below are calculated based on 53,952,776 shares of our common stock outstanding as of July 18, 2007.

Selling Stockholder	Number of Shares of Common		Maximum Number of Shares of Common	Number of Shares of Common Stock Beneficially Owned After this Offering	
	Stock Beneficially Owned Before this Offering Number	Percent*	Stock Being Sold in this Offering (1)	Number	Percent*
Abingworth Bioventures II A LP	135,178	*	43,000	92,178	*
Abingworth Bioventures III A LP	234,004	*	50,048	183,956	*
Abingworth Bioventures III B LP	142,846	*	30,551	112,295	*
Abingworth Bioventures III C LP	85,562	*	18,301	67,261	*
Abingworth Bioventures III Executives LP	3,726	*	797	2,929	*
Abingworth Bioequities Master Fund Ltd.	142,895	*	37,047	105,848	*
Amadeus II Affiliates Fund LP	41,284	*	5,358	35,926	*
Amadeus II A LP	619,285	1.148	80,377	538,908	*
Amadeus II B LP	412,857	*	53,585	359,272	*
Amadeus II C LP	288,999	*	37,509	251,490	*
Amadeus II D GMBH & Co KG	13,762	*	1,786	11,976	*
Andrew C Rockefeller	35,370	*	11,790	23,580	*
Bristol Investment Fund, Ltd.	9,261	*	9,261		*

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Caduceus Capital II, LP	19,779	*	19,779		*
Caduceus Capital Master Fund Ltd.	41,563	*	41,563		*
Capital Ventures International	41,676	*	41,676		*
Clarion Capital Corporation	32,282	*	9,261	23,021	*
Cranshire Capital, LP	8,600	*	8,600		*
HHMI Investments, LP	4,667	*	4,667		*
HFR SHC Aggressive Master Trust	6,259	*	6,259		*

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Selling Stockholder	Number of Shares of Common Stock Beneficially Owned Before this Offering		Maximum Number of Shares of Common Stock Being Sold in this Offering (1)	Number of Shares of Common Stock Beneficially Owned After this Offering	
	Number	Percent*		Number	Percent*
Enable Growth Partners, LP	42,783	*	42,783		*
Enable Opportunity Partners	7,242	*	7,242		*
OTA LLC	152,800	*	152,800		*
Paul M. W. Bruckman	29,239	*	8,599	20,640	*
Portside Growth and Opportunity Fund	28,078	*	28,078		*
PW Eucalyptus Fund Ltd.	3,500	*	3,500		*
Rockmore Investment Master Fund Ltd.	14,987	*	13,017	1,970	*
SF Capital Partners Ltd.	270,903	*	239,077	31,826	*
Shea Venture, LLC	41,710	*	14,826	26,884	*
SRB Greenway Capital, LP	3,388	*	3,388		*
SRB Greenway Capital (QP), LP	22,586	*	22,586		*
SRB Greenway Offshore Operating Fund, LP	1,806	*	1,806		*
Steeple Capital Fund I LP	890	*	890		*
Steeple Capital Fund II LP	8,516	*	8,516		*
Steeple Capital Offshore Fund Ltd.	14,387	*	14,387		*
Tang Capital Partners, LP	47,233	*	47,233		*
UBS Eucalyptus Fund LLC	31,312	*	31,312		*
UBS O Connor LLC F/B/O: O Connor PIPES Corporate Strategies Master Ltd.	35,903	*	35,903		*
ValueAct Capital Master Fund	351,227	*	350,283	944	*
Walker Smith Capital, LP	1,464	*	1,464		*
Walker Smith Capital (QP), LP	8,925	*	8,925		*
Walker Smith International Fund, Ltd	12,724	*	12,724		*

* Represents less than 1% of the total.

(1) Assumes offer and sale of all notes and shares, although selling securityholders

are not
obligated to sell
any notes or
shares of
common stock.

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Where You Can Find More Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. The SEC's website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room. We maintain a website at www.illumina.com. We have not incorporated by reference into this prospectus the information in, or that can be accessed through, our or the SEC's website, and you should not consider it to be a part of this prospectus.

Incorporation of Certain Documents by Reference

The SEC allows us to incorporate by reference into this prospectus the information we have filed with the SEC. The information we incorporate by reference into this prospectus is an important part of this prospectus. Any statement in a document that we filed with the SEC prior to the date of this prospectus and which is incorporated by reference into this prospectus will be considered to be modified or superseded to the extent a statement contained in this prospectus or any other subsequently filed document that is incorporated by reference into this prospectus modifies or supersedes that statement. The modified or superseded statement will not be considered to be a part of this prospectus, except as modified or superseded.

We incorporate by reference into this prospectus the information contained in the documents listed below, which is considered to be a part of this prospectus:

our annual report on Form 10-K for the fiscal year ended December 31, 2006, filed with the SEC on February 28, 2007 (file no. 000-30361);

our current reports on Form 8-K, filed with the SEC on February 1, 2007, February 16, 2007, February 20, 2007, February 21, 2007, March 2, 2007 and July 19, 2007 (excluding any current reports or portions of current reports that are furnished, and not filed, with the SEC) (file no. 000-30361);

the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on April 14, 2000, including any amendments or reports filed for the purpose of updating such description (file no. 000-30361);

the description of our preferred stock purchase rights contained in our registration statement on Form 8-A, filed with the SEC on May 14, 2001, including any amendments or reports filed for the purpose of updating such description (file no. 000-30361); and

all filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 on or after the date of this prospectus but prior to the termination of the offering of the securities covered by this prospectus.

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

Illumina, Inc.
9885 Towne Centre Drive
San Diego, California 92121
(858) 202-4500

Legal Matters

Various legal matters with respect to the validity of the shares of common stock offered by this prospectus will be passed upon for us by Dewey Ballantine LLP.

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Experts

Ernst & Young LLP San Diego, independent registered public accounting firm, has audited our consolidated financial statements and schedule included in our Annual Report on Form 10-K for the year ended December 31, 2006, and management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006, as set forth in their reports, which are incorporated by reference into this prospectus and elsewhere in the registration statement. Our financial statements and schedule and management's assessment are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

Ernst & Young LLP Palo Alto, independent registered public accounting firm, has audited the consolidated financial statements of Solexa, Inc. as of and for the years ended December 31, 2006 and 2005, included in our Current Report on Form 8-K (No. 000-30361) filed July 19, 2007, as set forth in their report, which is incorporated by reference into this prospectus and elsewhere in the registration statement. The Solexa, Inc. financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

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Part II

INFORMATION NOT REQUIRED IN PROSPECTUS**Item 14. Other Expenses of Issuance and Distribution**

The following table lists the costs and expenses payable by the registrant in connection with the sale of the common stock covered by this registration statement. All amounts other than the registration fee are estimates.

Description	Amount
Registration fee	\$ 2,934
Legal fees and charges	10,000
Accounting fees and expenses	10,000
Miscellaneous	5,000
Total	\$ 27,934

Item 15. Indemnification of Directors and Officers

Our amended and restated certificate of incorporation includes provisions that eliminate, to the fullest extent permitted by the Delaware General Corporation Law (the "DGCL"), the personal liability of our directors to us or our stockholders for monetary damages for breach of fiduciary duty as a director. Our amended and restated certificate of incorporation and bylaws also require us to indemnify our directors and officers to the fullest extent permitted by the DGCL.

Pursuant to these provisions, we have entered into indemnity agreements with each of our directors and certain of our officers.

Pursuant to Section 145 of the DGCL, a corporation generally has the power to indemnify its present and former directors, officers, employees and agents against expenses incurred by them in connection with any suit to which they are, or are threatened to be made, a party by reason of their serving in such positions so long as they acted in good faith and in a manner that they reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, had no reasonable cause to believe their conduct was unlawful.

These provisions do not eliminate the duty of care, and in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, may remain available under Delaware law. Each director will continue to be subject to liability for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for unlawful payments of dividends or unlawful stock repurchases or redemptions under Section 174 of the DGCL or for any transaction from which the director derived an improper personal benefit. These provisions also generally do not affect a director's responsibilities under any other laws, such as the federal securities laws.

Our bylaws also expressly permit us to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of us, or is or was serving at the request of us as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not we would have the power to indemnify him or her against such liability under the DGCL. Pursuant to this provision, we have acquired director and officer insurance policies that cover our directors and executive officers.

Item 16. Exhibits

Exhibit number	Description
3.1 ⁽¹⁾	Corrected Amended and Restated Certificate of Incorporation
3.2 ⁽²⁾	Bylaws

- 3.3⁽³⁾ Certificate of Designation for Series A Junior Participating Preferred Stock
- 4.1⁽⁴⁾ Specimen common stock certificate
- 4.2⁽⁵⁾ Second Amended and Restated Stockholder Rights Agreement, dated as of November 5, 1999, by and among Illumina, Inc. and certain stockholders of Illumina, Inc.

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Exhibit number	Description
4.3 ⁽⁶⁾	Rights Agreement, dated as of May 3, 2001, between Illumina, Inc. and Equiserve Trust Company, N.A.
5.1	Opinion of Dewey Ballantine LLP, counsel to Illumina, Inc., regarding the legality of the common stock being registered
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Independent Registered Public Accounting Firm
23.3	Consent of Dewey Ballantine LLP (contained in exhibit 5.1)
24.1	Power of attorney (contained in signature page)

(1) Incorporated by reference to Exhibit 3.1 to Illumina, Inc.'s Annual Report on Form 10-K (File No. 000-30361) for the year ended December 31, 2000, filed with the SEC on March 29, 2001.

(2) Incorporated by reference to Exhibit 3.2 to Illumina, Inc.'s Quarterly Report on Form 10-Q (File No. 000-30361) for the quarter ended July 2, 2006, filed with the SEC on August 2, 2006.

(3)

Incorporated by reference to Exhibit A to Exhibit 4.3 to Illumina, Inc. s registration statement on Form 8-A (File No. 000-30361), filed with the SEC on May 14, 2001.

(4) Incorporated by reference to Exhibit 4.1 to Illumina, Inc. s registration statement on Form S-1 (File No. 333-33922), filed with the SEC on April 3, 2000, as amended.

(5) Incorporated by reference to Exhibit 4.2 to Illumina, Inc. s registration statement on Form S-1 (File No. 333-33922), filed with the SEC on April 3, 2000, as amended.

(6) Incorporated by reference to Exhibit 4.3 to Illumina, Inc. s registration statement on Form 8-A (File No. 000-30361), filed with the SEC on May 14, 2001.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
Provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
- (i) If the registrant is relying on Rule 430B:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or
 - (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv)

Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

Table of Contents**Signatures**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on July 30, 2007.

Illumina, Inc.

By: /S/ Jay T. Flatley
Jay T. Flatley
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jay T. Flatley and Christian O. Henry, and each of them acting individually, as his or her attorney-in-fact, for him or her in any and all capacities, to sign any amendments (including post-effective amendments) to this registration statement and to file the same, with exhibits thereto and other documents in connection therewith, with the SEC, hereby ratifying and confirming all that each attorney-in-fact, or his or her substitute, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/S/ Jay T. Flatley Jay T. Flatley	President, Chief Executive Officer and director (principal executive officer)	July 30, 2007
/S/ Christian O. Henry Christian O. Henry	Senior Vice President and Chief Financial Officer (principal financial officer and principal accounting officer)	July 30, 2007
/S/ John R. Stuelpnagel John R. Stuelpnagel	Senior Vice President, Chief Operating Officer, General Manager - Microarray Business and Director	July 30, 2007
/S/ William H. Rastetter William H. Rastetter	Director	July 30, 2007
/S/ Daniel M. Bradbury Daniel M. Bradbury	Director	July 30, 2007
/S/ Karin Eastham Karin Eastham	Director	July 30, 2007
/S/ Paul Grint Paul Grint	Director	July 30, 2007

Paul Grint

/S/ David R. Walt Director July 30, 2007

David R. Walt

/S/ Jack Goldstein Director July 30, 2007

Jack Goldstein

/S/ Blaine Bowman Director July 30, 2007

Blaine Bowman

/S/ Roy Whitfield Director July 30, 2007

Roy Whitfield

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